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GAM3539 DKFZp564l1922 3' TAAAATATATATATATAT 80150 T
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GAM3539 DKFZP566M114 3' TATATATATATATATA 80053

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GAM3539 DKFZp761D1123' AATATATATATATATAT 80108

AATATATATATATAT

TTATATATATATATATA

GAM3539 DKFZp761D112 3' ATATATATATATGTATCATATA 80151 A _

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GAM3539 DNAJC5 3' ATATATACATATACACATAT 80152

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TATATATGTATATGTGTATA

GAM3539 DNCLI1 3' CATATATATATATATAT 80114

TATATATATATATATAT

GTATATATATATATATA

GAM3539 ELF2 3' TATATATATATATATATAT 79979

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GAM3539 ELF2 3' TATATATATATATATA 80053

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GAM3539 ELF2 3' ATATATATATATATATATATAT 79978

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GAM3539 ELF2 3' TATATATATATATATATAT 79980

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GAM3539 ELF2 3' ATATATATGTATGTATATAT 80158 A A ATATATAT TAT TATATATAT ΤΑΤΑΤΑΤΑ ΑΤΑ ΑΤΑΤΑΤΑΤΑ CGAM3539 ELF2 3' ATATGTATGTATATATATATAT 80156 A A ATAT TAT TATATATATAT TATA ATA ATATATATATA CC **GAM3539 ELF2** 3' ATATATGTATGTATATATATAT 80157 A A ATATAT TAT TATATATAT TATATA ATA ATATATATA CC 3' TATGTATATATATATAT 80155 GAM3539 ELF2 TAT TATATATATATAT ATA ATATATATATATA С GAM3539 ELF2 3' TATGTATATATATATATAT 80153 TAT TATATATATATATAT ΑΤΑ ΑΤΑΤΑΤΑΤΑΤΑΤΑ GAM3539 ELF2 3' ATATATATATGTATGTATATAT 80154 A A ATATATAT TAT TATATAT ΤΑΤΑΤΑΤΑ ΑΤΑ ΑΤΑΤΑΤΑ CGAM3539 EPB41L1 3' TATATATCTATATATAT 80159 Α TATATAT TATATATAT ATATATA ATATATATA G GAM3539 ERAP140 3' ATATATATGTATATGTACATAT 80161 ATATAT TATAT TATATAT 1111111 11111 1111111 TATATATA ATATA ATGTATA GAM3539 ERAP140 3' ATACACTCATATATATGTATAT 80160 Α Α ATATAT TATATAT TATAT TATGTG GTATATATA ATATA Α C GAM3539 EVI5 3' ATATATATATATATATATAT 79978 **ATATATATATATATATAT**

| GAM3539 E | VI5 TA | 3' AATATATATATATATATA 79989 AATATATATATATATATATAT A | III |
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| GAM3539 E | VI5 | 3' ATATATATATATATACATAT 80162 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 F | BXO9 | 3' ATATATATATATATATAT 79978 ATATATATATATATATATAT | |

| GAM3539 | FBXO9 | 3' | A | TATATATAT TATATATAT | ΓΑΤΑΤΑ | TATATAT | |
|---------|----------|----|---------|--|---------|---------|---|
| GAM3539 | FBXO9 | 3' | A | TATATATAT TATATATAT | ГАТАТА | ТАТАТАТ | |
| GAM3539 | FBXO9 | 3' | A | TATATATAT TATATATAT | ΓΑΤΑΤΑ | TATATAT | |
| GAM3539 | FBXO9 | 3' | A | TATATATAT TATATATAT | ΓΑΤΑΤΑ | TATATAT | |
| GAM3539 | FBXO9 | 3' | A | TATATATAT .TATATATAT !!!!!!!!!!!!!!!!!!! | ΓΑΤΑΤΑ | TATATAT | |
| GAM3539 | FBXO9 | 3' | A | TATATATAT .TATATATAT !!!!!!!!!!!!!!!!!!! | ΓΑΤΑΤΑ | ТАТАТАТ | |
| GAM3539 | FLJ10477 | 3' | T II | TGTATATAT TATATAT TATATATATATATATATATATATA | TATATA | ATAT | Α |
| GAM3539 | FLJ10482 | 3' | T | C TATATGTAT TATATATATATATATATATATATATATAT | AT TATA | | Α |
| GAM3539 | FLJ10482 | 3' | T II | TATATGTAT, TATATATATA IIIIIIIII IIIIIIIIIIIIIIIIII | AT TATA | ATATAT | А |
| GAM3539 | FLJ10620 | 3' | Т | C CATACATAT ATATATATA | | | |

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GAM3539 FLJ10782 3' TATTTATATATATATATATAT 80069 Α TAT TATATATATATATAT ΑΤΑ ΑΤΑΤΑΤΑΤΑΤΑΤΑ GAM3539 FLJ10782 3' TATATATATATATATATA 80053 **TATATATATATATA ATATATATATATATAT** GAM3539 FLJ11127 3' ATATGTATATACACACATAT 80165 ATAT TATATATATATATAT TATA ATATATATGTGTGTATA GAM3539 FLJ11342 3' TAACATATATATATATATAT 80166 _ A ΑT TAATATATAT ATAT TATATAT ATTGTATATATA TATA ATATATA Α _ GAM3539 FLJ12078 5' ATATATATATATATATATATAT 80167 Α ATATATATAT TATATATAT TATATATATA ATATATA GAM3539 FLJ12987 3' ATATATCCATATATATATATAT 80170 Α ATATAT TATATATATATAT TATATA GTATATATATATA G GAM3539 FLJ12987 3' ATATGTATATACATATAT 80168 Α ATAT TATATATATATAT TATA ATATATATGTATATA C GAM3539 FLJ12987 3' TATATATATACATATATA 80070 TATATATATATATATAT 1111111111111111111 **ATATATATATGTATATA** GAM3539 FLJ12987 3' ATATATATCCATATATATATAT 80179 Α ATATATAT TATATATATAT TATATATA GTATATATATA G GAM3539 FLJ12987 3' ATATATATATATCCATATATAT 80180 Α ATATATATAT TATATATAT

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TATATATATA GTATATATA
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GAM3539 FLJ12987 3' ATATATGTATATACATATAT 80173
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                     ATATAT TATATATATATAT
                     TATATA ATATATATGTATATA
                        C
GAM3539 FLJ12987 3' ATATACATATATATGTATATAT 80172
                                                Α
                     ATATATATATAT TATATAT
                     TATATGTATATA ATATATA
                           C
GAM3539 FLJ12987 3' ATATATATATCCATATATATAT 80178
                                              Α
                     ATATATAT TATATATAT
                     TATATATATA GTATATATA
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GAM3539 FLJ12987 3' ATATATATATATATATATATAT 80064
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                      ATATATATATATATATATA
                     TATATATATATATATATA T
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GAM3539 FLJ12987 3' TATATATATCCATATATAT 80176
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                     TATATATAT TATATATAT
                     ATATATATA GTATATATA
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GAM3539 FLJ12987 3' ATATATATATATATCCATATAT 80177
                                                Α
                     ATATATATATAT TATATAT
                     TATATATATATA GTATATA
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GAM3539 FLJ12987 3' TATATATATCCATATATAT 80169
                                            Α
                     TATATATAT TATATATAT
                     ATATATA GTATATATA
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GAM3539 FLJ12987 3' TATATATATATACATATATA 80175
                     TATATATATATATATAT
                     ATATATATATGTATATATA
GAM3539 FLJ12987 3' ATATCCATATATATATATATAT 80174
                                            Α
                     ATAT TATATATATATATAT
                     TATA GTATATATATATATA
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GAM3539 FLJ12987 3' TATGTATATACATATAT 80171
                     TAT TATATATATATAT
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| ATA ATATATATGTATATA C |
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| GAM3539 FLJ20079 3' TATATATATATATATATAT 80183 A TATATATAT TATATATATAT |
| GAM3539 FLJ20079 3' TATATATATGTATATAT 80081 A TATATATAT TATATATAT ATATATATA ATATATA C |
| GAM3539 FLJ20079 3' ATACATACATATGTGTATATAT 80181 A AT ATATATATAT TATATATAT |
| GAM3539 FLJ20079 3' ATATGTATATATATATACACAT 80182 A ATAT TATATATATATATAT |
| GAM3539 FLJ20079 3' ATACATACATATGTGTATATAT 80181 A AT ATATATATAT TATATATAT TATGTATGTATA ATATATAT CAC |
| GAM3539 FLJ20079 3' ATACATACATATGTGTATATAT 80181 A AT ATATATATAT TATATATAT |
| GAM3539 FLJ21791 3' TACATATATATACATATAT 80044 TATATATATATATATATATAT |
| GAM3539 FLJ22060 3' ATATATATCATATATATATA 80184 T ATATATAT ATATATATATAT |
| GAM3539 FLJ22393 3' AATATATATATATATGTATGTATA 80185 A A III TA AATATATATATAT TAT TATAT A |
| GAM3539 FLJ22393 3' ATATATATATGTATGTATATAT 80154 A A ATATATATAT TAT TATATAT |

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TATATATA ATA ATATATA
                         CC
GAM3539 FLJ22393 3' ATATATATGTATGTATATATAT 80158
                                            A A
                     ATATATAT TAT TATATATAT
                     ΤΑΤΑΤΑΤΑ ΑΤΑ ΑΤΑΤΑΤΑΤΑ
                        C
GAM3539 FLJ23047 3' ACATATATATATATATATAT 80186
                     ATATATATATATATAT
                     TGTATATATATATATATA
GAM3539 FLJ23259 3' ATATATATGTAATATATATA 80187
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        TATA
                       ATATAT ATATATATAT A
                     TATATA TATATATATATA T
                       CAT
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GAM3539 FLJ23259 3' ATATGTATATACATATATA 80188
        Т
                     ATAT TATAT ATATATATAT
                     TATA ATATA TGTATATATA
                      C A
GAM3539 FLJ23259 3' ATATATATATTTACATATATAT 80083
                                             Α
                     ATATATAT TATATATAT
                     TATATATA ATGTATATA
GAM3539 FLJ23259 3' ATATGTATATTACATATATA 80189
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        TA
                      ATAT TATAT ATATATATAT A
                     TATA ATATA TGTATATATA T
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                               111
GAM3539 FLJ23259 3' ATATATATATTTACATATATAT 80083
                                             Α
                     ATATATAT TATATATAT
                     TATATATATA ATGTATATATA
                         Α
GAM3539 GAPCENA 3' ATATATATATATATATATATAT 79978
                     ATATATATATATATATATAT
                     TATATATATATATATATA
GAM3539 GAPCENA 3' ATATATATATATATATATATAT 79978
                     ATATATATATATATATATAT
                     TATATATATATATATATA
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GAM3539 GAPCENA 3' ATATATATATATATATATATAT 79978

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| GAM3539 | GAPCENA | 3' ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
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| GAM3539 | GAPCENA | 3' ATATATATATATATATATAT 79978 ATATATATATATATATATATAT TATATATA |
| GAM3539 | GAPCENA | 3' ATATATATATATATATATAT 79978 ATATATATATATATATATATAT TATATATA |
| GAM3539 | GAPCENA | 3' ATATATATATATATATATAT 79978 ATATATATATATATATATATAT TATATATA |
| GAM3539 | GAPCENA | 3' TATATATATATATACAT 80190 TATATATATATATATATAT ATATATATATATATATGTA |
| GAM3539 | GAPCENA | 3' TATATATATATATATATAT 79979 TATATATATATATATATATAT ATATATAT |
| GAM3539 | GAPCENA | 3' ATATTTATATATATATATA 80191 A ATAT TATATATATATATAT |
| GAM3539 | GAPCENA | A 3' ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' ATATATATATATATATATAT 79978 ATATATATATATATATATATAT TATATATA |
| GAM3539 | GAPCENA | 3' АТАТАТАТАТАТАТАТАТАТ 79978 АТАТАТАТАТАТАТАТАТАТАТАТ |

| | | | TATATATATATATATATA |
|---------|---------|----|--|
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |
| GAM3539 | GAPCENA | 3' | ATATATATATATATATATAT 79978 ATATATATATATATATATATAT |

GAM3539 GAPCENA 3' ATATATATATATATATATATAT 79978

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GAM3539 GAPCENA 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 GAPCENA 3' ATATATATATATATATATAT 79991 Α ATATATATATATAT TATAT TATATATATATATA ATATA С GAM3539 GAPCENA 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 GAPCENA 3' ATATATATATATATATAT 79973 **ATATATATATATATAT TATATATATATATATA** GAM3539 GFR 3' TACATATATATATATA 80192 Α TATATATAT TATATATA ATGTATATATA ATATATAT GAM3539 GRID1 3' AATATATATATATATAT 80108 **AATATATATATATAT** TTATATATATATATATA Т GAM3539 GRID1 3' ATATATATATATATAAACAT 80193 ATATATATATATATA ATAT TATATATATATATAT TGTA Т GAM3539 GTPBP2 3' ATACATATGTATATATATAT 80194 Ш AT ATATATAT TATATATATAT AT TATGTATA ATATATATATA TA Ш GAM3539 GTPBP2 3' ACATATGTATATATATATAT 80195 Α ATATAT TATATATATATAT TGTATA ATATATATATATA С GAM3539 HNRPA3 3' ATATGTATATACATATATATAT 80205 Α ATAT TATATATATATATAT

| | | TATA ATATATGTATATATA C | | | |
|--------|---------------|---|---|---|---|
| GAM353 | 9 HNRPA3 A | 3' ATATATATATATATATGTATAT 80204 ATATATATATATATATAT TATAT | | Α | Ш |
| GAM353 | 9 HNRPA3 | · | Α | Α | |
| GAM353 | 9 HNRPA3 | 3' ATATATATATATATGTATAT 79990 ATATATATATATAT TATATAT | | Α | |
| GAM353 | 9 HNRPA3 | _ | Α | | |
| GAM353 | 9 HNRPA3 | 3' TATATATCCATATATATAT 80203 TATATAT TATATATATATAT | Α | | |
| GAM353 | 9 HNRPA3 | 3' ATATATATATATATGTATATAT 79990 ATATATATATATAT TATATAT | | A | |
| GAM353 | 9 HNRPA3 | 3' ATATATATATATGTATATAT 80207 ATATATATATAT TATATAT TATATATATATA ATATATA C | Α | | |
| GAM353 | 9 HNRPA3 | 3' ATATATCCATATATATATAT 80170 ATATAT TATATATATATATAT | Α | | |
| GAM353 | 9 HNRPA3 | 3' TATATATCCATATATATAT 80206 TATATAT TATATATATAT | Α | | |

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GAM3539 HNRPA3 3' ATATATATATATATATATATATAT 80204

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ATATATA GTATATATA

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A III

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TATATATATATATA ATATA T
                           C
                              III
GAM3539 HNRPA3 3' TATATATATCTATATATAT 80201
                                            Α
                     TATATAT TATATATAT
                     ΑΤΑΤΑΤΑ ΑΤΑΤΑΤΑ
                         G
GAM3539 HNRPA3 3' TATATACATATATATATAT 80200
                     TATATATATATATAT
                     ATATATGTATATATATA
GAM3539 HNRPA3 3' ATATATATATATATGTATATAT 79990
                                                Α
                     ATATATATATAT TATATAT
                     TATATATATATA ATATATA
GAM3539 HNRPA3 3' ATATATACCTGTATATATATAT 80197
         ΑT
                      ATATATAT TATATATATAT
                     TATATATG ATATATATATA
                        GAC
GAM3539 HNRPA3 3' TATATATGTATATACATATAT 80199
                                            Α
                     TATATAT TATATATATAT
                     ATATATA ATATATGTATATA
GAM3539 HNRPA3 3' ATATCCATATATATATATATAT 80174
                                            Α
                     ATAT TATATATATATATAT
                     TATA GTATATATATATATA
                       G
GAM3539 HNRPA3 3' ATATCCATATATATATATATAT 80174
                     ATAT TATATATATATATAT
                     TATA GTATATATATATATA
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GAM3539 HNRPA3 3' TATATATATATATAAAATAT 80196
                                              TAT
                     TATATATATATA ATAT
                     ATATATATATAT TATA
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GAM3539 HRIHFB24363' ATATATATATATATATAT 79973
                     ATATATATATATATATAT
                     TATATATATATATATA
GAM3539 HRIHFB2436 3' TATATATATATATATATA
                                    80053
                     TATATATATATATA
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| GAM3539 | IL1RAPL1 | 3' | TATATATATGTATATATA 80209 TATATATATAT TATATATAT A | Α | III |
|---------|----------------|----|---|---|-------|
| GAM3539 | IL1RAPL1 | 3' | TATATATATGTATATAA 80208 TATATATATAT TATATAT A | Α | ATIII |
| GAM3539 | IL1RAPL1 | 3' | ATATATATGTATATATAT 79998 ATATATATAT TATATATAT | Α | |
| GAM3539 | KIAA0022 | 3' | TATATATATATATAGCAC 80210 TATATATATATATATA TAT | - | |
| GAM3539 | KIAA0100 | 3' | TATATATATATATATA 80212 TATATATA ATATATATA | Т | |
| GAM3539 | KIAA0100 | 3' | TAATATATATATTTATATAT 80211 TAATATATATATATAT TATATAT | А | |
| GAM3539 | KIAA0103 | 3' | TATATATATACATGTATAT 80140 TATATATATATATAT TATAT | Α | |
| GAM3539 | KIAA0189 | 3' | ATATATATATATATATAT 79978 ATATATATATATATATATATAT | | |
| GAM3539 | KIAA0189 AT | 3' | ATATATACACACATATATAT 80214 ATATATATATATATATATATAT | | III |
| GAM3539 | KIAA0189 | 3' | ATATATACACACATATATAT 80215 ATATATATATATATATATAT | | |

TATATATATGTGTGTATATATA

GAM3539 KIAA0189 3' ATATATACACACATATATAT 80213
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TATATATGTGTGTATATATA

GAM3539 KIAA0189 3' ATATATATACACACATATATAT 80215 ATATATATATATATATATATAT

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GAM3539 KIAA0189 3' ACACATATATATATATATAT 80216 ATATATATATATATATATATATATAT

TGTGTATATATATATATATA

TATATATATATATATATA

GAM3539 KIAA0189 3' ATATATATATATATATATATAT 79978

ATATATATATATATATAT

TATATATATATATATATA

GAM3539 KIAA0189 3' ATATATATACACACATATATAT 80215

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TATATATATGTGTGTATATATA

GAM3539 KIAA0189 3' TATATACACACATATATAT 80217

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ATATATGTGTGTATATATA

GAM3539 KIAA0189 3' ATATATATATATATATATATAT 79978

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GAM3539 KIAA0222 3' AATATATATATATATATATATA 80074

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GAM3539 KIAA0222 3' ATATATATATATATATATATAT 79978

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GAM3539 KIAA0222 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 KIAA0222 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 KIAA0222 3' ATATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 KIAA0222 3' AATATATATATATATATATATA 79989 Ш TΑ AATATATATATATATATA A TTATATATATATATATATA T Ш GAM3539 KIAA0222 3' TATATATATATATATATA 80053 **TATATATATATATA ATATATATATATAT** GAM3539 KIAA0295 3' ATATATATTTATATATATATAT 80218 Α Ш ATATATAT TATATATATAT A Α TATATATA ATATATATATA T 111 GAM3539 KIAA0377 3' AATAAATATATATATATATA 80148 T AATA ATATATATATATAT TTAT TATATATATATATA Т GAM3539 KIAA0391 3' TAATATATACATATAGCTAT 80219 TΑ TAATATATATATA TAT ATTATATATGTATAT ATA CG GAM3539 KIAA0443 3' AATATATATATATACA 80220 AATATATATATATA TTATATATATATATGT GAM3539 KIAA0545 3' ATATATATATATATATATATATAT 79978 **ATATATATATATATATAT**

| GAM3539 | KIAA0545 TA | 3' | AATATATATATATATATA 79989 AATATATATATATATATATATAT A | III |
|---------|----------------|----|---|-------|
| GAM3539 | KIAA0545 TA | 3' | AATAAATATATATATATA 80221 T AATA ATATATATATATATAT A | III |
| GAM3539 | KIAA0545 A | 3' | AATATATATATATATATA 80074 AATATATATATATATATATA A | ATIII |
| GAM3539 | KIAA0546 A | 3' | AATATATATATATATATA 80074 AATATATATATATATATAT A | ATIII |
| GAM3539 | KIAA0546 | 3' | TATATATATATATA 80053 TATATATATATATATATA ATATATAT | |
| GAM3539 | KIAA0546 TA | 3' | AATATATATATATATATA 79989 AATATATATATATATATATATA A | III |
| GAM3539 | KIAA0650 A | 3' | ATATATTATATATATATA 80222 A ATATAT TATATATATATATAT A | III |
| GAM3539 | KIAA0650 A | 3' | ATATTTATATATATATATAT 79966 A ATAT TATATATATATATAT A | III |
| GAM3539 | KIAA0650 | 3' | TATATATATATATATAA 79967 TATATATATATATATATAT A | ATIII |
| GAM3539 | KIAA0660 | 3' | TATATATATATATATAT 79980 TATATATATATATATATAT | |

| GAM3539 | KIAA0716 A | 3' | ACATATATATGTATATATATAT 80224 ATATATATAT TATATATATAT A | A | III |
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| GAM3539 | KIAA0716 | 3' | CACATATATATGTATATATA 80223 TATATATATAT TATATATAT A | Α | III |
| GAM3539 | KIAA0731 | 3' | ATATATATATGTATATAA 80225 ATATATATATAT TATATAT A | Α | ATIII |
| GAM3539 | KIAA0731 A | 3' | ATATATATATGTATATAT 80226 ATATATATATAT TATATATAT A | Α | III |
| GAM3539 | KIAA0731 | 3' | ATATATATGTATATATAT 79998 ATATATATAT TATATATAT | Α | |
| GAM3539 | KIAA0757 | 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT | | |
| GAM3539 | KIAA0757 | 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT | | |
| GAM3539 | KIAA0757 A | 3' | ATATATATATATATATAT 80064 ATATATATATATATATATATAT A | | III |
| GAM3539 | KIAA0757 | 3' | ATATATATATATATATAT 79978 ATATATATATATATATATATAT | | |
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GAM3539 KIAA0844 3' ATATATATGTATATGTATAT 80198
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GAM3539 KIAA0844 3' ATATATGTATATGTATATAT 80228
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GAM3539 KIAA0848 3' TAATATTATATATATATAT 80229
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GAM3539 KIAA0872 3' TATATATATATATACACATAT 80233
                     TATATATATATATATAT
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GAM3539 KIAA0872 3' ACACATATGTATATGTATATAT 80230
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GAM3539 KIAA0872 3' ATATACATATATATATATATAT 80080
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GAM3539 KIAA0872 3' ATATATACACATATATATATAT 80234
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GAM3539 KIAA0872 3' ATATATATACACATATATATAT 80232
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GAM3539 KIAA0872 3' ATATACACATATATATATATAT 80231 Ш Α ATATATATATATATATA A TATATGTGTATATATATATA T Ш GAM3539 KIAA0895 3' TATATATATACAAGTATAT 80235 TA TATATATATA TATAT ATATATATATGT ATATA TC GAM3539 KIAA0937 3' CATATATATATATATATATAT 80110 **TATATATATATATATAT** GTATATATATATATATATA GAM3539 KIAA0937 3' CATATATATATATATATAA 80238 ATIII TATATATATATATAT A GTATATATATATATATA IIITA GAM3539 KIAA0937 3' TATATATATATATATATAC 80237 **TATATATATATATAT ATATATATATATATATG** GAM3539 KIAA0937 3' AATATATATGCATATATATATA 80236 Α Τ AATATATAT TATATATATAT TTATATATA GTATATATATA С GAM3539 KIAA0976 5' TACATATATACACATAT 80239 **TATATATATATATAT ATGTATATATATGTGTATA** GAM3539 KIAA0993 3' TAATATATATATATATATATA 80240 TAT TAATATATAT ATATATATATAT ATTATATATA TATATATATATA GAM3539 KIAA0993 3' TAATATATATATATATATATA 80240 TAT TAATATATATATATATATATAT ATTATATATA TATATATATATA Α GAM3539 KIAA0993 3' TATATATATATATATGTACAT 80241 Α TATATATATATAT TATAT

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GAM3539 KIAA1196 3' AATATATATATATATATATA 80246 ATIII Α Α AATATAT TATATATAT TTATATATA ATATATATA Т C IIITA GAM3539 KIAA1198 3' AATATATATAAATATATAT 80247 Т AATATATATA ATATATAT TTATATAT TATATATA Т GAM3539 KIAA1260 3' TATATATATATATATATATAT 80248 Α TATATATATATAT TATAT ATATATATATATA ATATA GAM3539 KIAA1281 3' TATATTTATATATATATATAT 80251 Α TATAT TATATATATATAT ATATA ATATATATATATA Α GAM3539 KIAA1281 3' ATATGTATACGTATATATATAT 80250 A TA ATAT TATA TATATATAT TATA ATAT ATATATATA C GC GAM3539 KIAA1281 3' TATATATATGTATATACA 80249 Α TATATATA TATATATA ATATATATA ATATATATGT С GAM3539 KIAA1281 3' TATATATATATATATATATATA 80061 - 111 TATATATATATAT A ATATATATATATA ATATA T C III GAM3539 KIAA1281 3' ATATATATATATATGTATATAT 79990 Α ATATATATATAT TATATAT TATATATATATA ATATATA C GAM3539 KIAA1321 3' ATATATATATATGTATATATAT 80015 Α ATATATATAT TATATATAT TATATATATA ATATATATA C GAM3539 KIAA1321 3' TATATATATATATATATATA 79967 ATIII TATATATATATATAT A

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GAM3539 KIAA1332 3' TATATAATATATATATATATAT 80254
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GAM3539 KIAA1361 3' TATATATATGTACACACAT 80255
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GAM3539 KIAA1384 3' ACATATATTTATATATATATAT 80256
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GAM3539 KIAA1856 3' TATATATATATTATATATAT 80265
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GAM3539 METAP1 3' ACATATATATTTCCATATATAT 80274
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GAM3539 MGC10992 3' TATATATATATATAAAACAT 80275
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GAM3539 MGC29937 3' AATATATACATATATAT 80276
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GAM3539 MGC9912 3' ACATATATATCTATATGTATAT 80277
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GAM3539 MKP-7 3' AATATATATGTATGTACATATA 80278
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GAM3539 NFAT5 3' TATATATATGTATATATAT 80081 Α

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GAM3539 NMT1 3' ATATATATATATATATATATA 80279 ATATATATA TATATATATAT Т

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GAM3539 PCDH20 3' AATATATATATGTATGTATATA 80281 A A Ш TA AATATATAT TAT TATATAT A TTATATATA ATA ATATATA T

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GAM3539 PELI1 5' AATATATATATATATATGTAT 80282 Α AATATATATATATAT TAT

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GAM3539 SLK 3' TAATATGTATATGTATATAT 80294 A A III
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GAM3539 SNRK 3' TATATATATATACACACAT 80295

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GAM3539 SPIN 3' TATATATGTATACACACATAT 80296 A

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GAM3539 SPRY4 3' CAATATATATATATATAT 80297

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GAM3539 STRIN 3' CATACACACATATGTGTATATA 80298

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GAM3539 TIMM10 3' ATATATATATATATATATATAT 79978

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| GAM3539 ZF | 3' ATATATATATGTATATATAT 79998 A ATATATATAT TATATATAT TATATATATA ATATATATA C | |
| GAM3539 ZF | 3' ATATATATATATATGTATAT 79991 A ATATATATATATATAT TATAT | |
| GAM3539 ZNF2 | 38 3' ATATATATGTATATATATAT 79999 A ATATATAT TATATATATATAT | |
| | 38 3' ATATATATATATTATTATA 80304 III TATA ATATATA TATATAT A TATATATAT ATATATA T AATAA | |
| GAM3539 ZNF2 | 38 3' ATATATGTATATATATATAT 80000 A ATATAT TATATATATATAT | |
| GAM3539 ZNF2 | 38 3' TATATATATATATATATA 80021 A III TATATATAT TATATATATA A | |

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GAM3539 ZNF238 3' ATATATATATATATTATTATATA 80305
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GAM3539 ZNF384 3' TATATATATATATATATATAT 80307
                                               Α
                     TATATATATAT TATATAT
                     ATATATATATA ATATATA
GAM3539 ZNF384 3' TAATATATTTATATATATATAT 80306
                                             Α
                     TAATATAT TATATATATAT
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GAM3539 ZYG
             3' AATATATATATATATATATAT 80308
         ΑT
                      AATATATATATATATATAT
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GAM3539 ZYG
             3' ATATATATATATATATATATA 80279
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                      ATATATATATA TATATATATAT
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GAM3539 LOC113251 3' ATATATATATATATATATATAT 80243
                                                  Α
                     ATATATATATATAT TATAT
                     TATATATATATATA ATATA
GAM3539 LOC124801 3' TAATATATATTTTCATATATAT 80309
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                      TAATATAT TATATATAT
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GAM3539 LOC125434 3' ATATATATATATATATATAT 79976
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                     TATATATATATA ATATATA
GAM3539 LOC145474 5' TACATAAATTATATATATATAT 80310
                                              TA
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GAM3539 LOC145868 5' AATATATATATGTATATATA 80316
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GAM3539 LOC145868 5' ATATATATATATATATATAT 79999
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                     ATATATAT TATATATATAT
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GAM3539 LOC145868 5' ATATATATATATATATATATA 80313
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GAM3539 LOC145868 5' ATATATATATATATATAGTATA 80314
         Т
                      ATATATATATATATA TATAT
                     TATATATATATATAT ATATA
                            C
GAM3539 LOC145868 5' ATATGTATATATATATATAT 79996
                                             Α
                     ATAT TATATATATATATAT
                     TATA ATATATATATATA
                       С
GAM3539 LOC145868 5' TAATATATATAACATTTATATA 80315
                                                T A
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                      TAATATATA ATAT TATATAT
                      ATTATATATAT TGTA ATATATA
GAM3539 LOC145868 5' TAACATATATAACATTTATATA 80312
                                                T A
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                      TAATATATA ATAT TATATAT
                     ATTGTATATAT TGTA ATATATA
GAM3539 LOC145868 5' TAATACATAACATTTATATATA 80311
                                               T A
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                      TAATATATA ATAT TATATATAT
                     ATTATGTAT TGTA ATATATATA
GAM3539 LOC145868 5' TAACATATATAACATTTATATA 80312
                                                T A
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                      ATTGTATATAT TGTA ATATATA
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GAM3539 LOC145868 5' ATATATGTATATATATATAT 80000
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                     TATATA ATATATATATA
                        С
GAM3539 LOC145868 5' TATATATATATATATATAT 79980
                     TATATATATATATAT
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GAM3539 LOC146176 5' AATATATATATATATATAT 80317 Α AATATATAT TATATATAT TTATATATA ATATATATA GAM3539 LOC146909 3' TATATATCTATATATAT 80159 Α TATATAT TATATATAT ΑΤΑΤΑΤΑ ΑΤΑΤΑΤΑΤΑ G GAM3539 LOC148195 5' TATATATATGTATACATAC 80319 Α TATATAT TATATAT ATATATA ATATGTATG C GAM3539 LOC148195 5' ATATACGTATATATATATATAT 80001 TA ATATA TATATATATATAT TATAT ATATATATATA GC GAM3539 LOC148195 5' TATATACGTATATATATATAT 80318 TΑ TATATA TATATATATAT ATATAT ATATATATATA GC GAM3539 LOC148195 5' TATATACGTATATATATAT 80323 TA TATATA TATATATAT ATATAT ATATATATA GC GAM3539 LOC148195 5' TATATACATACATATGTATAT 80322 Α TATATATATATAT TATAT ATATATGTATGTATA ATATA C GAM3539 LOC148195 5' AATATATATGTGTATATATATA 80320 ATA Ш TA AATATATAT TATATATAT A TTATATATA ATATATATA T CAC GAM3539 LOC148195 5' TATATATATATATATACAT 80321 Α TATATATAT TATATAT ATATATATA ATATGTA C GAM3539 LOC149267 3' TATATATATATATATATA 80053 **TATATATATATATA**

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| GAM3539 | LOC149267 3' | TATATATATATATATAT 79980 TATATATATATATATATAT ATATATAT | |
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| GAM3539 | LOC151273 3' | TATATATGCATATATATAT 80325 TATATAT TATATATATAT | A |
| GAM3539 | LOC151273 3' | TATATATGCATATATATATAT 80324 TATATAT TATATATATATAT | Α |
| GAM3539 | LOC151521 3' | CATAAATATATATATATAT 80327 TATA ATATATATATATATAT | Т |
| GAM3539 | LOC151521 3' | ATATATATATATAATAT 80326 ATATATATATATATA ATAT | Т |
| GAM3539 | LOC153196 5' T | ATATACACATTATATATATA 80332 ATATATATAT ATATATATATAT | - |
| GAM3539 | LOC153196 5' | AATATATATATACACAT 80331 AATATATATATATATATAT TTATATATA | |
| GAM3539 | LOC153196 5' | ATATATATATATATATAT 79978 ATATATATATATATATATAT | |
| GAM3539 | LOC153196 5' T | ATATATACACATTATATATATA 80330 ATATATATATAT ATATATATAT | - |
| GAM3539 | LOC153196 5' T | ATACACATTATATATATATA 80328 ATATATAT ATATATATATATAT | _ |

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GAM3539 LOC153196 5' TATATATATATATATATAT 79980 TATATATATATATATAT

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GAM3539 LOC153196 5' ATATATATATATATATAACACA 80333

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GAM3539 LOC153196 5' AATATATATATATACACAT 80331

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TTATATATATATATGTGTA

GAM3539 LOC153196 5' TATATATATATATATATATATA 80003

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GAM3539 LOC153196 5' ACACATTATATATATATATATA 80329

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GAM3539 LOC153222 3' ATATATATATATATATATATAT 79978

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GAM3539 LOC153222 3' ATATATATATATATATATATA 80167

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GAM3539 LOC153222 3' ATATATATATATATATATAT 79976

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GAM3539 LOC153222 3' TATATATATATATATATAT 79980

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GAM3539 LOC153222 3' TATATATATATATATATAT 79979

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GAM3539 LOC153222 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 LOC153387 5' ATATATATATATGTGTATATAT 80342 AΤ ATATATATAT TATATATAT TATATATATA ATATATA CAC GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 LOC153387 5' ATATATATATATATATATAT 79973 **ATATATATATATATAT TATATATATATATATA** GAM3539 LOC153387 5' ATATATATATATATATAT 80072 **ATATATATATATAT TATATATATATATA** GAM3539 LOC153387 5' ATATATATGTATATACATATAT 80334 Α ATATATAT TATATATATAT TATATATA ATATATGTATATA GAM3539 LOC153387 5' TATATGTATATACATATAT 80336 Α TATAT TATATATATAT ATATA ATATATGTATATA C GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978 **ATATATATATATATATATAT** TATATATATATATATATA GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 LOC153387 5' TATATATATATATATATATATA 80003 Ш

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GAM3539 LOC153387 5' TATATATATATATATATAT 79980 TATATATATATATATAT

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GAM3539 LOC153387 5' ATATATATATGTGTATATATAT 80343

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GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978

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GAM3539 LOC153387 5' ATATATATGCACATATATAT 80338

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GAM3539 LOC153387 5' ATATATATGCACATATATATAT 80341 A III

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GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978

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GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978

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GAM3539 LOC153387 5' ATATATATATATATATAT 80072

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GAM3539 LOC153387 5' ATATATGTATATACATATAT 80337 Α ATATAT TATATATATAT TATATA ATATATGTATATA C GAM3539 LOC153387 5' ATATATATGTATATACATATAT 80334 Α ATATATAT TATATATATAT TATATATA ATATATGTATATA GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 LOC153387 5' TATATACATATATGTATATAT 80340 Α TATATATATAT TATATAT ATATATGTATATA ATATATA GAM3539 LOC153387 5' TATATATATATATATATATAT 79979 **TATATATATATATATAT ATATATATATATATATA** GAM3539 LOC153387 5' ATATATATATATATGTGTATAT 80335 Α AT ATATATATATAT TATATAT TATATATATATA ATATATA CAC GAM3539 LOC153387 5' ATATATATATATATATATATAT 79978 **ATATATATATATATATATAT** TATATATATATATATATA GAM3539 LOC153387 5' ATATATATATATATATAT 79973 ATATATATATATATATAT **TATATATATATATATA** GAM3539 LOC153387 5' ATATACATATATGTATATATAT 80339 Α ATATATATAT TATATATAT

| | | TATATGTATATA ATATATATA C | |
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| GAM3539 | LOC153387 5' | ATATATATGCACATATATATAT 80338 ATATATAT TATATATATATAT | Α |
| GAM3539 | LOC153387 5' | ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 | LOC153387 5' | ATATATATATATATATAT 79978 ATATATATATATATATATAT TATATATA | |
| GAM3539 | LOC153387 5' | ATATATATATATATATAT 79978 ATATATATATATATATATAT TATATATA | |
| GAM3539 | LOC153396 3' | TAATATATATATATACA 80344 TAATATATA ATATATATATA | Т |
| GAM3539 | LOC153454 3' | TATATATATGTATATACA 80249 TATATATAT TATATATATA | A |
| GAM3539 | LOC153454 3' TAT | CATATATATATGTGTATATA 80345 ATATATATATAT TATATAT AT | A III |
| GAM3539 | LOC153454 3' | | ГА А |
| GAM3539 | LOC153454 3' AT | ATATATGTGTATATATACATAT 80347 ATATAT TATATATATATATAT | A |
| GAM3539 | LOC153727 5' | ATATATACCCATATATATATAT 80348 | Α |

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| | | TATATATG GTATATATATA | |
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| GAM3539 | LOC157285 3' | G TATATATATATTTATATAT 80020 TATATATATAT TATATAT | Α |
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| GAM3539 | LOC158160 3' T | ACATATATATAAATATATA 80349 ATATATATAT ATATATATAT TGTATATATA TATATATATA ATT | AT_ |
| GAM3539 | LOC158629 5' | ATTATATATATATATAT 80350 ATATATATATATATAT TATAT | Α |
| GAM3539 | LOC158629 5' | ATATATATATGTATAT 80351 ATATATATAT TATAT TATAT | A A |
| GAM3539 | LOC158629 5' | TATATATATATATATATAT 79979 TATATATATATATATATATAT | |
| GAM3539 | LOC158629 5' | ATATATATATATATATAT 79978 ATATATATATATATATATATAT | |
| GAM3539 | LOC158629 5' | ATATATATATATATGTATAT 79991 ATATATATATATATAT TATAT | А |
| GAM3539 | LOC158629 5' | ATATATATATATATATAT 79973 ATATATATATATATATATATAT | |
| GAM3539 | LOC158629 5' | ATATATATATATATGTATAT 79991 ATATATATATATATAT TATAT | А |

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GAM3539 LOC158629 5' ATATATATATATATATATATAT 79978

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GAM3539 LOC161742 3' ATATATATATATATATAT 80072 **ATATATATATATATAT TATATATATATATA** GAM3539 LOC168667 3' TATATATATATACACATATAT 80352 **TATATATATATATATAT ATATATATATATGTGTATATA** GAM3539 LOC196411 3' TATATATGTATACATATAT 80353 Α TATATAT TATATATAT ATATATA ATATGTATATA GAM3539 LOC196411 3' ATATATATATGTATACATATAT 80359 Α ATATATAT TATATATAT TATATATA ATATGTATATA С GAM3539 LOC196411 3' TATATATGTATACATATAT 80353 Α TATATAT TATATATAT ATATATA ATATGTATATA GAM3539 LOC196411 3' TATATATGTATACATATAT 80353 Α TATATAT TATATATAT ATATATA ATATGTATATA C GAM3539 LOC196411 3' ATATATATGTATACATATAT 80357 ATATATAT TATATATAT TATATATA ATATGTATATA C GAM3539 LOC196411 3' ATATATATGTGTATATATATAT 80358 AT ATATATAT TATATATATAT TATATATA ATATATATATA CAC GAM3539 LOC196411 3' ATACATACATATATGTGTATAT 80354 Ш Α__ **ATA** TATATATATAT TATATAT A ATGTATGTATATA ATATATA T CAC Ш GAM3539 LOC196411 3' TATATATGTATACATATAT 80353 Α TATATAT TATATATAT

| | | ATATATA ATATGTATATA C | | |
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| GAM3539 | LOC196411 3' | TATATATGTATACATATAT 80353 TATATAT TATATATATAT | Α | |
| GAM3539 | LOC196411 3' | TATATATGTATACATATAT 80353 TATATAT TATATATATAT | Α | |
| GAM3539 | LOC196411 3' ATATA | ATACATATATATGTGTATATAT 80356 TATATATA TATATATATAT GTATATAT ATATATATATA T ACAC III | Α | III |
| GAM3539 | LOC196411 3' | TATATATGTATACATATAT 80353 TATATAT TATATATATAT | Α | |
| GAM3539 | LOC196411 3' AT | ATATATGTGTATATATATATAT 80355 ATATAT TATATATATATATAT | A | |
| GAM3539 | LOC196411 3' | TATATATGTATACATATAT 80353 TATATAT TATATATATAT | Α | |
| GAM3539 | LOC196411 3' | TATATATGTATACATATAT 80353 TATATAT TATATATATAT | Α | |
| GAM3539 | LOC196989 3' TAT | AATATATATATATATATA 80360 ATATATATATATATATATATAT | | III |
| GAM3539 | LOC196989 3' | ATATATATATATATATAT 79978 ATATATATATATATATATATAT | | |
| GAM3539 | LOC196989 3' | ATATATATATATATATATATATATATATATATATATAT | | |

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GAM3539 LOC196989 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT TATATATATATATATATA** GAM3539 LOC196989 3' ATATATATATATATATATATAT 79978 **ATATATATATATATATAT** TATATATATATATATATA GAM3539 LOC199907 3' ATATATATATATATGGAGATAT 80361 Ш ATATA TATATATAT ATATATA A ATATATATA TATATATA T CCTC 111 GAM3539 LOC201626 3' TATATATATATATACATATAT 80362 Α TATATATAT TATATATAT ATATATATA ATGTATATA GAM3539 LOC203078 3' ATATGTATATATATATATATAT 79996 Α ATAT TATATATATATATAT TATA ATATATATATATA GAM3539 LOC203078 3' ATATATGTATATATATATATAT 80000 Α ATATAT TATATATATATAT TATATA ATATATATATATA GAM3539 LOC203078 3' ATATATATGTATATATATAT 79999 Α ATATATAT TATATATATAT TATATATA ATATATATATA C GAM3539 LOC203078 3' TATATATATATATATATATATA 80021 Α Ш TATATATAT TATATATAT A ATATATATA ATATATATA T GAM3539 LOC220477 5' TAATATATATTATATATAT 80006 Α TAATATAT TATATAT ATTATATA ATATATA Α GAM3539 LOC221087 3' ATATATATATATGTACACACAT 80363 Α ATATATATAT TATATATAT

TATATATATA ATGTGTGTA

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GAM3539 LOC221312 3' ACATTTATATATATATATATAT 80364 A A

ATAT TATATAT TATATATAT

TGTA ATATATA ATATATA

A C

GAM3539 LOC245806 3' ATATGCATACATATATATATAT 80365 A

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GAM3539 LOC254228 3' ATATATATATATATATATATAT 79978

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GAM3539 LOC254228 3' ATATATATATATATATATATAT 79978

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GAM3539 LOC254228 3' TATATATATATATATATAT 79979

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GAM3539 LOC254228 3' ATATATATATATATATATATAT 79978

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| GAM3539 | LOC254228 3' | TATATATATATATAT 79980 TATATATATATATATAT ATATATAT |
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| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC254228 3' | ATATATATATATATATAT 79978 ATATATATATATATATATAT |
| GAM3539 | LOC255646 3' ATATA | ATATATATATAGGAGATAT 80361 III TATATATATAT ATATATAT A ATATATATATA TATATATA T |
| GAM3539 | LOC255647 3' ATATA | CCTC III ATATATATATATGGAGATAT 80361 III TATATATATAT ATATATAT A |

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                          CCTC
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GAM3539 LOC255798 3' ATATATATATATATATATATAT 80367
                                                Α
                     ATATATAT TATATATAT
                     TATATATA ATATATATA
GAM3539 LOC255798 3' ATATATATATATATATATATAT 80366
                                               Α
                     ATATATAT TATATATATAT
                      TATATATA ATATATATATA
GAM3539 LOC91907 3' CAATATATTCATATATAT 80368
                                              Α
                     TAATATAT TATATATAT
                      GTTATATA GTATATATA
GAM3539 LOC92218 3' ACATATATACACACATATAT 80369
                     ATATATATATATATAT
                      TGTATATATGTGTGTATATA
GAM3540 ELAVL2 3' TGACTTACAAAGACATTTACTA 80372
                                             CGTAG TT
                      TGAC GCG CATTTACTAA
                      ACTG
                           TGT GTAAATGATT
                       AA TTCT
GAM3540 LOC154222 3' TGGCCGTAGGCTCACCC
                                     80373
                                           Α
                                                GT
                     TG CCGTAGGC TCATTT
                      AC GGCATCCG AGTGGG
                      С
GAM3541 B4GALT4 5' TATTACGTGAATAATATCTAT 80376
                      TAT ATGTGAATAATAT CTGT
                      ATA TGCACTTATTATA GATA
                       Α
             3' TGTGAGTTTATACTGTAT 80377
GAM3541 GJA1
                                          ATAA
                      TGTGA TATACTGTAT
                      11111 1111111111
                      ACACT ATATGACATA
                        CAA
GAM3541 KCNH5
              3' ATATGTATATACTGTA
                                  80378
                                          AATA
                      ATGTG ATATACTGTA
                      TATAC TATATGACAT
                        \mathsf{A}_{\_}
GAM3541 SORCS3 3' ATATGTACATATACTGTA 80379
                                            AATA
                     ATGTG ATATACTGTA
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TATAC TATATGACAT
                       ATG
GAM3541 DKFZp566H0824 5' TGCAAAACTAATACTGT 80380 TG
                     TG AA TAATATACTGT
                     AC TT ATTATATGACA
                      GT TG
GAM3541 FAM8A1 3' ATGTGAATATGCTGTAT
                                  80381
                                           ATATA
                     ATGTGAATA CTGTAT
                     TACACTTAT GACATA
                         AC
GAM3541 FLJ23142 3' TGCAGAACTAATATACTGTAT 80382
                     TGT GAAT AATATACTGTAT
                     ACG CTTG TTATATGACATA
                      T A
GAM3541 KIAA0865 3' ATATGTCCCGTATACTGTAT 80383
                                            AATAA
                     ATGTG TATACTGTAT
                     TATAC ATATGACATA
                       AGGGC
GAM3541 KIAA1223 3' ATGTAAATGTACTGTA
                                          AATA
                                  80384
                     ATGTGAAT TACTGTA
                     TACATTTA ATGACAT
GAM3541 KRTAP17-1 3' TCATGTGAATAAGTAAAGTAT 80385
                                               TATACT
                     TCATGTGAATAA GTAT
                     AGTACACTTATT
                                   CATA
                          CATTT_
GAM3541 MGC10520 3' CATCGTGTGGATAATACA 80386
                     TATC TGTG ATAATATA
                     GTAG ACAC TATTATGT
                      C C
GAM3541 LOC149301 3' TGTTGAATACACACTGTAT 80387
                     TGT GAATA TATACTGTAT
                     ACA CTTAT GTGTGACATA
                      Α
GAM3541 LOC158696 3' ATGTGTTATATACTGTA
                                   80388
                                           AATA
                     ATGTG ATATACTGTA
                     TACAC TATATGACAT
                       AA_{-}
GAM3541 LOC201695 5' ATGTGAAGTGTGTACTGTAT 80389
                                             TAATA
                     ATGTGAA TACTGTAT
```

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TACACTT ATGACATA
                        CACAC
GAM3542 DGKG
             3' TTGAAACAGAATGTA
                                           TATAC
                                  80392
                     TTGAAACAGA
                                  ATGTA
                      AACTTTGTCT TACAT
GAM3542 PPP6C 3' CTGGGACAGGTATACATA 80393
                                           AA A
                      TTG ACAG TATACATG
                      111 1111 11111111
                      GAC TGTC ATATGTAT
                       CC C
GAM3542 FLJ20666 5' TTGAAGCAAATATACCCAGC 80394
                                                  ΑT
                     TTGAA CAGATATAC GT
                     AACTT GTTTATATG CG
                            GGT
GAM3542 KIAA1695 3' TTGAAACATGGTGTACATGTA 80395
                                               GATA
                     TTGAAACA TACATGTA
                     AACTTTGT
                              ATGTACAT
                         ACCAC
GAM3542 LOC155376 5' TTGAAAAAAAACACATGTAAC 80396
                                               C T
                     TTGAAA AGA ATACATGTAAC
                      AACTTT TTT TGTGTACATTG
GAM3542 LOC222233 5' TTGAAAAAAAAACACATGTAAC 80396
                                               CT
                     TTGAAA AGA ATACATGTAAC
                      AACTTT TTT TGTGTACATTG
                        Т
                                               C T
GAM3542 LOC253532 5' TTGAAAAAAAAACACATGTAAC 80396
                     TTGAAA AGA ATACATGTAAC
                      AACTTT TTT TGTGTACATTG
GAM3542 LOC254875 5' TTGAAAAAAAAACACATGTAAC 80396
                                               C T
                      TTGAAA AGA ATACATGTAAC
                      AACTTT TTT TGTGTACATTG
                        _ T
GAM3543 MLLT3 3' AGGTGGCTATTTGGTCCCCCCA 80399
                                                 A_ GTG
         G
                      AGGTGGTTATTTG TCTG
                      TCCACCGATAAAC GG G C
                           CAG G GT
GAM3543 PFN2
             3' AGATGGTTATGTTGGG
                                  80400
                                            TTGATC
                     AGGTGGTTAT
                                  GTTGGG
```

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TCTACCAATA
                               CAACCC
                                        TTGATC
GAM3543 PFN2 3' AGATGGTTATGTTGGG
                                80400
                    AGGTGGTTAT
                                GTTGGG
                    TCTACCAATA
                                CAACCC
GAM3543 FLJ10971 3' AGGGGTTATTTTGGG
                                 80401 T
                                           GATCGT
                    AGG GGTTATTT
                                 TGGG
                    TCC CCAATAAA ACCC
GAM3543 MGC4638 3' AGGTGGTTGTTGGGTTGGG 80402
                                           AT ATC
                    AGGTGGTT TTG GTTGGG
                    TCCACCAA AAC CAACCC
                       C C
                                         A ATCGT
GAM3543 PRO1048 3' AGGTGGTTGTTTATAGGA 80403
                    AGGTGGTT TTTG TGGGA
                    TCCACCAA AAAT ATCCT
                       C _
GAM3543 LOC221876 5' AGGAGGTGTCGTTGGG
                                         T TATTT A
                                   80404
                    AGG GGT G TCGTTGGG
                    TCC CCA C AGCAACCC
GAM3544 PLAGL1 3' TCTAAAAACATAAGACA 80407 T
                                           Т
                    TCTA AAACATAAG ATA
                    AGAT TTTGTATTC TGT
                      Т
GAM3544 BANP 5' TCCATAAACTATATAAT 80408
                                         ATAA
                    TCTATAAAC GTATATAAT
                    AGGTATTTG TATATATA
                        Α
GAM3544 KIAA1579 3' TCCATGGATATAAGTATACAAT 80409
                                           AAAC
                     TCTAT ATAAGTATAATAA
                    AGGTA TATTCATATGTTATT
                      CCTA
GAM3544 KIAA1755 3' TCTCTAAACATAAAATACAAT 80410
                                              Т
                    TCT TAAACATAAG ATATAAT
                    AGA ATTTGTATTT TATGTTA
                     G
GAM3544 USP25 3' TACAAACAGCATCATATAATA 80411
                                           TAAG
                    TATAAACA TATATAATA
```

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CGTA
GAM3545 BCL11A 3' AACAAGGGGTTGGGGACTCA 80414 T A A A C
                    AACA GG GG TTG GGAC CA
                    TTGT CC CC AAC CCTG GT
                     T _ _ C A
GAM3545 BCL11A 3' AACAAGGGGTTGGGGACTCA 80414
                                         TAAAC
                    AACA GG GG TTG GGAC CA
                    TTGT CC CC AAC CCTG GT
                     T C A
GAM3545 COG6
            3' TGGTTGGATTTAGGACCCA 80415
                                           G
                    TGG GGATT AGGACCCA
                    ACC CCTAA TCCTGGGT
                     AA A
GAM3545 CPSF4 3' TGATGTCGACTGCAGGGACCCA 80416 C GAG A
        C
                    A ATG GATTG GGACCCAC
                    A TAC CTGAC CCTGGGTG
                    C AG_ GTC
GAM3545 FGF1
            3' CATGGAGGGACTCAGCC 80417
                                         G GAC
                    CATGGAGG ATT AG CC
                    GTACCTCC TGA TC GG
                       CG
                                         G GAC
GAM3545 FGF1
            3' CATGGAGGGACTCAGCC 80417
                    CATGGAGG ATT AG CC
                    GTACCTCC TGA TC GG
                       CG
                                        G GAC
GAM3545 FGF1
            3' CATGGAGGGACTCAGCC 80417
                    CATGGAGG ATT AG CC
                    GTACCTCC TGA TC GG
                       C G ___
GAM3545 GNGT2 3' ATGGAGGGACAGGACCCAC 80418
                                          ATTG
                    ATGGAGG AGGACCCAC
                    TACCTCC TCCTGGGTG
                      CTG
GAM3545 KCNA7 3' CAACATGGCCCTAGGGGACCCA 80419
                                            AGGA A_
                    TAACATGG TTG GGACCCAC
        C
                    GTTGTACC GAT CCTGGGTG
                       GG__ CC
GAM3545 PAK4
            3' AACATGGGGGAGGCC
                                80420
                                        A ATT A
```

AACATGG GG GAGG CC

ATGTTTGT GTATATTAT

```
TTGTACC CC CTCC GG
                       _ ___ C
GAM3545 PPP2CA 3' ATGCAGGAAGAACCCAC 80421 G TTG
                    ATG AGGA AGGACCCAC
                    TAC TCCT TCTTGGGTG
                     G
GAM3545 SLC21A9 3' CATGGAGGCAGCCTGGCCCAC 80422 ATTGA A
                    CATGGAGG GG CCCAC
                    GTACCTCC
                              CC GGGTG
                       CGTCGGA
GAM3545 ARNTL2 5' CATGGAGGAGCCCCGGGCCC 80423
                                            GA A
                    CATGGAGGA TT GG CCC
                    GTACCTCCT GG CC GGG
                       C GG C
GAM3545 C20orf27 3' TGGGGAGTGGGGGACCCAC 80424 A T A
                    TGG GGA TG GGACCCAC
                    ACC CCT AC CCTGGGTG
                     _ C CC
GAM3545 DKFZP566K1924 3' ACATGGGAGGACCCA
                                     80425 AGGATT
                    ACATGG GAGGACCCA
                    TGTACC CTCCTGGGT
                                          GGATTG _ _
GAM3545 FLJ12568 3' TAACATGGAAGGTACACC 80426
                    TAACATGGA AGG AC CC
                    ATTGTACCT TCC TG GG
                           ΑТ
GAM3545 KIAA0478 3' CAGGAGGATTGCGTGAGCCC 80427 T AG
                    CA GGAGGATTG GA CCC
                    GT CCTCCTAAC CT GGG
                         GCA C
GAM3545 KIAA1396 3' CATGGGGGTCAGGGACCCAC 80428
                                          A A GA
                    CATGG GG TT GGACCCAC
                    GTACC CC AG CCTGGGTG
                      _ C TC
GAM3545 MGC10715 3' ACAGAAAATTGAGGATTCAC 80429
                                              CC
                    ATGGAGGATTGAGGA CAC
                    TGTCTTTTAACTCCT GTG
                          AA
GAM3545 MGC16142 5' ACATGGAAGTAGGGCCTAC 80430
                                            ATTG A C
```

ACATGGAGG AGG CC AC

```
A___ C A
GAM3545 MGC27382 5' ACGTGGACAGACAGGACCCA 80431 A _ TG
                    AC TGGA GGAT AGGACCCA
                    TG ACCT TCTG TCCTGGGT
                    C G _
GAM3545 MMD 3' CAACATGAATGAGGACC 80432
                                         GGAT
                    TAACATGGA TGAGGACC
                    GTTGTACTT ACTCCTGG
GAM3545 NPC1L1 3' ACTTGGAAACTGGGGACCCAC 80433 A G A
                    AC TGGAG ATTG GGACCCAC
                    TG ACCTT TGAC CCTGGGTG
                    A C
GAM3545 SCYA16 3' TAACATGGGAGGTAGAGA 80434
                                          ATT
                    TAACATGG AGG GAGG
                    ATTGTACC TCC CTCT
                       C AT_
GAM3545 SH3GLB1 3' TAACATGGAAGATACTTAACC 80435
                                          TGAG
                    TAACATGGAGGAT GACC
                    ATTGTACCTTCTA TTGG
                         TGAA
GAM3545 TEX27 3' TAACATGGGGCAACCAGGCCCA 80436
                                          A ATTG A
                    TAACATGG GG AGG CCCAC
        С
                    ATTGTACC CC TCC GGGTG
                       _ GTTGG _
GAM3545 TIP120B 3' CATGGAAGATGCCCA 80437
                                        T AGGA
                    CATGGAGGAT G CCCA
                    GTACCTTCTA C GGGT
GAM3545 LOC124460 3' ATGGGTAGGGGGGGACCCAC 80438
                                           ATTGA
                    ATGG AGG GGACCCAC
                    TACC TCC CCTGGGTG
                     CA CCC
GAM3545 LOC255004 3' TAACATGGTGACCTGGGCCTAC 80439 AG GA A C
                    TAACATGG GATT GG CC AC
                    ATTGTACC CTGG CC GG TG
                       A_ AC _ A
GAM3545 LOC90120 5' TGGGGACTCAGGACCCAC 80440
                                         A G
                    TGG GGATT AGGACCCAC
```

TGTACCTTC TCC GG TG

```
ACC CCTGA TCCTGGGTG
                      G
GAM3545 LOC90288 3' GGAGGCCTTGGACCCAC 80441 A GA
                   GGAGG TT GGACCCAC
                   CCTCC GG CCTGGGTG
                     _ AA
GAM3546 BCL9 3' CGTCTTACGCATGGGAGGGG 80444 CCATC
                   CGTC TGTGCG GGGAGGGG
                   GCAG ATGCGT CCCTCCCC
GAM3546 DRIL1 5' GCCCCTGCGGGGAGGGG 80445
                                      ATCTG
                   GTCCC TGCGGGGAGGGG
                   CGGGG ACGCCCTCCCC
GAM3546 KLHL2 5' CGTTCCATCCGCCCCGGAGGGG 80446 C
                                            GCGG
        G
                    CGT CCATCTGT GGAGGGGG
                   GCA GGTAGGCG CCTCCCCC
                    Α
                        GGG
GAM3546 LPIN2 3' TCCCTTGCTGTGGGGAGGGGG 80447
                                        AT GC
                   TCCC CTGT GGGGAGGGG
                   AGGG GACA CCCCTCCCC
                    AAC
GAM3546 MNT
          3' GTCCAGGTGGGGAGGGGG 80448
                                      CATCT GC
                   GTCC GT GGGGAGGGG
                   CAGG CA CCCCTCCCC
                    TC
GAM3546 PAX7 5' CGTCCAGAAGCTGGGGAGGGGG 80449
                                       CATCT GC
                   CGTCC GT GGGGAGGGG
                   GCAGG CG CCCTCCCC
                     TCTT_ A_
GAM3546 PAX7 5' CGTCCAGAAGCTGGGGAGGGG 80449
                                         CATCT GC
                   CGTCC GT GGGGAGGGG
                   GCAGG CG CCCCTCCCCC
                     TCTT_ A_
GAM3546 PPP2R5B 5' GTCCGGCCTTTGGGGGGGGGG 80450
                                         CA G C A
                   GTCC TCT TG GGGG GGGGG
                   CAGG GGA AC CCCC CCCCC
                    CC A _ _
GAM3546 RABL2B 3' TCTGCCTGCGGGGAGGGGG 80451
                   TCTGT GCGGGGAGGGG
```

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AGACG CGCCCCTCCCCC
                      GA
GAM3546 AIG-1 3' GTCCTCATTGGGGGAGGGGG 80452 CTG C
                    GTCC CAT TG GGGGAGGGG
                    CAGG GTA AC CCCCTCCCCC
GAM3546 AKAP6 3' TCATGCTTGGGGAGGGGG 80453 T
                    TC GTGC GGGGAGGGG
                    AG TACG CCCCTCCCC
                     AA
GAM3546 C14orf4 5' GCCCAGGGCGTGGGGAGGGGG 80454 T TCT C
                    G CCCA GTG GGGGAGGGGG
                    C GGGT CGC CCCCTCCCCC
                    CC A
GAM3546 C5orf3 3' GTGTCATCCTGGGGAGGGG 80455 CC GTGC
                    GT CATCT GGGGAGGGG
                    CA GTAGG CCCCTCCCC
                    CA A__
GAM3546 DKFZp547A023 3' GTCTTATTTGGCAGAGGGGG 80456 CC C T A
                    GTC AT TG GCGGGG GGGG
                    CAG TA AC CGTCTC CCCC
                     AA A _
GAM3546 FLJ10829 3' CCTCCCTGGCGGGGGGGGG 80457 G ATC T
                    C TCCC TG GCGGGGAGGG
                    G AGGG AC CGCCCCTCCCC
                    G
GAM3546 FLJ14768 3' CATTCCACAGTCGGGGAGGGGG 80458 C CT G
                    CGT CCAT GT CGGGGAGGGGG
                    GTA GGTG CA GCCCCTCCCCC
                     A T_ _
GAM3546 FLJ20195 3' CGCCCCGTCGAGGGAGGGG 80459
                                          ATCT G _
                    CGTCCC GT CG GGGAGGGG
                    GCGGGG CA GC CCCTCCCC
                        _ _ T
GAM3546 GMEB2 3' CGCCTCGTCTGTGCGGCCCCTG 80460
                                          CCA
                                                 GGAG
        GG
                     CGTC TCTGTGCGG GGG
                    GCGG AGACACGCC CCC
                     AGC
                           GGGGA
GAM3546 HSPC195 5' CCCGAGGCGGGGAGGGGG 80461
                                         T_
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TCTG GCGGGGAGGGG

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GGGC CGCCCCTCCCCC
                     TC
GAM3546 NOVA2 3' TCCGGGCTGGGGAGGGG 80462
                                         Т
                    TCTG GC GGGGAGGGGG
                    AGGC CG CCCCTCCCCC
                     CA
            3' TCCTGGAGGTGTGGGGAGGGGG 80463
                                          CATCT C
GAM3546 PTRF
                    TCC GTG GGGGAGGGG
                    AGG CAC CCCCTCCCC
                     ACCTC A
GAM3546 RAB3IL1 3' TCTGGGGACTGGGGAGGGGG 80464
                                          T\__
                    TCTG GC GGGGAGGGG
                    AGAC TG CCCCTCCCC
                     CCC A
GAM3546 SLC2A11 5' TCTCATCTGTGCGTCCTGGG 80465 C
                                            GGGAG
                    TC CATCTGTGCG GGG
                    AG GTAGACACGC CCC
                     Α
                         AGGA
GAM3546 THTPA 3' GTCTCAACACGGGGGGGGGGAG 80466
                                           C TC T
        GGGG
                      GTC CA TG GCGGGGAGGGG
                    CAG GT GC CGCCCTCCCCC
                     A TGT CCC
GAM3546 LOC148696 5' GTCTCACGTTTGTGGGGAGGGG 80467 C CTG C
                    GTC CAT TG GGGGAGGGG
        G
                    CAG GTG AC CCCCTCCCCC
                     A CAA A
GAM3546 LOC152765 5' CTCCCCAAAGTGGGGAGGGG 80468 GT TCT GC
                    C CCCA GT GGGGAGGGG
                    G GGGT CA CCCCTCCCCC
                    AG TT_ __
GAM3546 LOC197003 3' ATCTGTGGAAGGGGG
                                 80469
                                         GCG
                    ATCTGT GGGAGGGG
                    TAGACA CCTTCCCCC
GAM3547 APPBP2 3' AGTAACCTAACATTTCCAT 80472
                    AGTAACCTAACA CCAT
                    TCATTGGATTGT GGTA
                        AAA
                                            CAC__
GAM3547 CDY1 3' AAAGTAACCTAAATCTGCACA 80473
                    AAAGTAACCTAA CATA
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TAGAC
GAM3547 CDY1 3' AAAGTAACCTAAATCTGCACA 80473
                                             CAC
                     AAAGTAACCTAA CATA
                     TTTCATTGGATT GTGT
                         TAGAC
GAM3547 RGS2 3' AGTTTTCAACACCATAGCACT 80474
                                         AACC
                                                  Α
                     AGT TAACACCATA CACT
                     TCA GTTGTGGTAT GTGA
                      AAA
                             С
GAM3547 DKFZP761I2123 3' AGGAACCTGACACCACACA 80475 T A
                     AG AACCT ACACCATA CAC
                     TC TTGGA TGTGGTGT GTG
                     C C
GAM3547 EPSIN 5' AAGGAACCTAACAGCCCCACT 80476 T
                                               ATAA
                     AAG AACCTAACA CC CACT
                     TTC TTGGATTGT GG GTGA
                      С
                          CG
GAM3547 KIAA1191 3' AAAGTAAGTTAACACCAC 80477
                                           CC
                     AAAGTAA TAACACCAT
                     TTTCATT ATTGTGGTG
GAM3547 KIAA1486 5' GGAGTAATCCAGCACCAT 80478 A C A
                     A AGTAA CTA CACCAT
                     1 11111 111 111111
                     C TCATT GGT GTGGTA
                     CAC
GAM3547 KIAA1546 3' AAATAACCTGCATTCATAACA 80479
                                             AACAC
                     AAGTAACCT CATAACA
                     TTTATTGGA GTATTGT
                        CGTAA
GAM3547 KPNB3 3' AAATAACTTTAGCCATAACACT 80480
                                            CTAACA
                     AAGTAAC CCATAACACT
                     TTTATTG GGTATTGTGA
                       AAATC
GAM3547 SDCCAG33 3' AGCTTAACACCAAAAACA 80481
                                         AACC
                                                  T_
                     AGT TAACACCA AACA
                     TCG ATTGTGGT TTGT
                      A____
                            TT
GAM3547 LOC152245 3' AAAGTAATTTAAACCACAACAC 80482
                                              CC C
```

AAAGTAA TAA ACCATAACACT

Т

TTTCATTGGATT GTGT

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TTTCATT ATT TGGTGTTGTGA
                       AA _
GAM3547 LOC203611 3' AAAGTAACCTAAATCTGCACA 80473
                                               CAC
                    AAAGTAACCTAA CATA
                    TTTCATTGGATT GTGT
                         TAGAC
GAM3547 LOC255465 5' AAAGTGACCCAACATCAC 80483
                                          A C
                    AAAGT ACCTAACA CAT
                    TTTCA TGGGTTGT GTG
                      С
GAM3547 LOC91291 5' AAAGTAACTAACTGCCATA 80484
                                            C A
                    AAAGTAAC TAAC CCATA
                    TTTCATTG ATTG GGTAT
                        AC
GAM3547 LOC93587 3' GTAACCTACCATACAC 80485
                                         AAC A
                    GTAACCT ACCATA CAC
                    CATTGGA TGGTAT GTG
GAM3548 ALDOB 3' TTGGTTGCAGCTATCTCCTTC 80488
                                            AA CATTA
                    TTGGTTGCA TATT CTTC
                    AACCAACGT ATAG GAAG
                        CG AG
GAM3548 SH3BP2 3' TGGTTGCAGATCGTTTACTTC 80489
                                            A ATTCA
                    TGGTTGCA AT TTACTTC
                    ACCAACGT TA AATGAAG
                       C GCA
GAM3548 CARD6 3' TTGGTTGTTAATTCATTATTTC 80490
                                           CAAAT
                    TTGGTTG ATTCATTA TTC
                    AACCAAC TAAGTAAT AAG
                            Α
                       AAT
GAM3548 KIAA1332 3' TTGGCTGCATAAACATTATTTC 80491
                                             AA TT C
                    TTGGTTGCA TA CATTA TTC
                    AACCGACGT AT GTAAT AAG
                        __ TT A
GAM3548 LOC116437 3' TTGGTTGCACCATGTTACTT 80492
                                             AATATTCA
                    TTGGTTGCA
                                TTACTT
                    AACCAACGT
                                AATGAA
                        GGTAC_
GAM3548 LOC222001 5' TTGCTTGCAAATTACT
                                  80493
                                        G
                                            ATTCAT
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TTG TTGCAAAT

TACT

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AAC AACGTTTA ATGA
                      G
GAM3549 FLJ11021 3' TTAATGGAAGTGGGTTTA 80496
                                           ATAG C
                     TTAATGGAA GG GTTTG
                     AATTACCTT CC CAAAT
                        CA__ _
GAM3549 KIAA1371 3' TTAATGAAGGTGGCACAATGTT 80497
                                            AATAG TT_
                     TTAATGGA GGCG TGTT
                     AATTACTT CCGT ACAA
                        CCA
                              GTT
GAM3549 PTRF
             3' TTAGTAGAGATGGGGTGTTTG 80498
                                          AAAC
                     TTA TGGA AT GGG GTTTG
                     AAT ATCT TA CCC CAAAC
                      C C C A
GAM3549 SMBP 3' TCAATGGAAATAGATGTT 80499
                                             GC
                     TTAATGGAAATAGG GTT
                     AGTTACCTTTATCT CAA
                          A_{-}
GAM3549 ZFD25 3' TTAATAGAGATGGGGTTT 80500
                                          AAC
                     TTAATGGA AT GGG GTTT
                     AATTATCT TA CCC CAAA
                        C _ _
GAM3549 LOC122830 3' TTAATGGAGGTAGGGTTTTTA 80501
                                              AA CG
                     TTAATGGA TAGGG TTTG
                     AATTACCT ATCCC AAAT
                        CC AA
GAM3549 LOC127003 3' TTAATGGAAGTGGGCCGCAGT 80502
                                               ATA TT
                     TTAATGGAA GGGC GT GT
                     AATTACCTT CCCG CG CA
                        CA_ G T_
GAM3549 LOC93097 5' TTAATGGAAGGGTGTT
                                           AAT C
                                  80503
                     TTAATGGA AGGG GTT
                     AATTACCT TCCC CAA
                          _ A
GAM3550 ABCB4 5' CTTTCCCATGTACCAGCTGTCT 80506
                                             CGT __ CA
                     CTTTCCCA TGTAT GC TCT
                     GAAAGGGT ACATG CG AGA
                            GT AC
                                             CGT __ CA
GAM3550 ABCB4 5' CTTTCCCATGTACCAGCTGTCT 80506
                     CTTTCCCA TGTAT GC TCT
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GAAAGGGT ACATG CG AGA
                           GT AC
GAM3550 BACH1 3' TCTTTTATAATCAGTATGCCAT 80507 CCCACGTT
        CT
                     TCTTT GTATGCCATCT
                    AGAAA CATACGGTAGA
                      ATATTAGT
                                         GTT A C
GAM3550 GIPR 3' TTCCCCACTCAGTTGTCATCT 80508
                    TTTCCCAC GT TG CATCT
                    AAGGGGTG CA AC GTAGA
                       AGT A
GAM3550 GTF2H1 3' TCTTTTCAAAGCACATGCCATC 80509
                                          CC CGTTG
                    TCTTT CA TATGCCATCT
        Т
                    AGAAA GT GTACGGTAGA
                      A TTCGT
GAM3550 IL1F5 3' TCTTCCCCGCGTCTCCTCT 80510 A GTATG A
                    TCTTTCCC CGTT CC TCT
                    AGAAGGG GCAG GG AGA
                       C A______
                                        CACGT __
GAM3550 KL 3' TCTCTCCTGTATCTGCCATCT 80511
                    TCTTTCC TGTA TGCCATCT
                    AGAGAGG ACAT ACGGTAGA
                         _ AG
GAM3550 PCDH9 5' TTTCCCACTGTCTTCATCT 80512 GT ATGC
                    TTTCCCAC TGT CATCT
                    AAAGGGTG ACA GTAGA
                       _ GAA_
GAM3550 C20orf150 3' TCTGTCCCACACACCTGCCATC 80513 T TTGTA
        Т
                    TCT TCCCACG TGCCATCT
                    AGA AGGGTGT ACGGTAGA
                        GTGG
                     С
GAM3550 DKFZP434F1735 5' TCTTTCCCATTTCTCTACATCT 80514 CG GTA C
                    TCTTTCCCA TT TGC ATCT
                    AGAAAGGGT AG ATG TAGA
                       AA AG_ _
GAM3550 DKFZp566O084 3' TCTTTCCCACTTGTGAGACAAA 80515 G AT_ C_
                     TCTTTCCCAC TTGT GC ATCT
        TCT
                    AGAAAGGGTG AACA TG TAGA
                       _ CTC TT
```

GAM3550 DMTF1 5' TCTCTCCCATGTTCCTATC 80516

TCTTTCCCA GTT CC ATC

C GTATG _

```
AGAGAGGT CAA GG TAG
                        Α ____ Α
GAM3550 FLJ10648 3' TCCTTCCCGTGTTGGAGCC 80517
                                            AC TAT
                     TCTTTCCC GTTG GCC
                     AGGAAGGG CAAC CGG
                        CA CT
GAM3550 FLJ12619 3' TCTTTCCCATGGTTGTAT 80518
                                           C_{-}
                     TCTTTCCCA GTTGTAT
                     AGAAAGGGT CAACATA
                        AC
GAM3550 H2BFB 3' TTTCAGACGTCCTGCCATCT 80519
                                          CC GTA
                     TTTC ACGTT TGCCATCT
                     AAAG TGCAG ACGGTAGA
                      TC G
GAM3550 KIAA0565 5' TCTTTTTCACGTTATGC 80520
                                         CC TG
                     TCTTT CACGT TATGC
                     AGAAA GTGCA ATACG
                       AA
GAM3550 KIAA1272 3' TCTTTTCCTGCTGTCATC 80521
                                          C AC ATGC
                     TCTTT CC GTTGT CATC
                     AGAAA GG CGACA GTAG
                       A A_{\perp}
GAM3550 KIAA1546 3' TCTTTTCCTAGATGCCATC 80522
                                          C ACGT T
                     TCTTT CC TG ATGCCATC
                     AGAAA GG AT TACGGTAG
                       A C
GAM3550 PRO1598 3' TCTTTCCCACTGTGGTTGT 80523
                     TCTTTCCCAC GTTGT
                     AGAAAGGGTG CAACA
                         ACAC
GAM3550 SPRY4 3' CTTTCCACGTGTGCCATC 80524
                                          C TGTA
                     CTTTCC ACGT TGCCATC
                     GAAAGG TGCA ACGGTAG
                       _ C_
GAM3550 TIMM22 3' TCTTTCCCTTCAGATGTTATCT 80525
                                            ACG GT CC
                     TCTTTCCC TT ATG ATCT
                     AGAAAGGG AG TAC TAGA
                        A_ TC AA
GAM3550 LOC112448 3' TCTTTCCCCTGTGTGAGTTATC 80526
                                              AC T ATGCC
         Т
                     TCTTTCCC GT GT ATCT
```

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GA _ CTCAA
                                80527 C GTATGC
GAM3550 LOC143916 3' TCTTTCCCAGTTCAT
                    TCTTTCCCA GTT CAT
                    AGAAAGGGT CAA
                                   GTA
GAM3550 LOC145663 3' TCTTTCCACCATGCCATC 80528
                                        C GTTG
                    TCTTTCC AC TATGCCATC
                    AGAAAGG TG GTACGGTAG
GAM3550 LOC150622 3' CTTTCCCATATGCCAT
                                  80529
                                          CGTTG
                    CTTTCCCA TATGCCAT
                    GAAAGGGT ATACGGTA
GAM3550 LOC201287 5' TCTTTTTCACGTTATGC 80520
                                         CC TG
                    TCTTT CACGT TATGC
                    11111 11111 11111
                    AGAAA GTGCA ATACG
                      AA
GAM3550 LOC203504 5' TCTCTCCTGTCTGCCATC 80530
                                           CACGT A
                    TCTTTCC TGT TGCCATC
                    AGAGAGG ACA ACGGTAG
                        G
GAM3550 LOC256207 5' TCTTTTTCACGTTATGC 80520
                                         CC TG
                    TCTTT CACGT TATGC
                    AGAAA GTGCA ATACG
                      AA
GAM3550 LOC91145 5' TCTTTCCAGTCTATGCCAT 80531 CAC G
                    TCTTTCC GTT TATGCCAT
                    AGAAAGG CAG ATACGGTA
                       T__ _
GAM3551 MAP3K7IP2 3' TGACATGAGGGGAAAAAGGTA 80534
                                           AAAAATA TT
                    TGACGTGA GA AGGTA
                    ACTGTACT TT TCCAT
                        CCCC__ TT
GAM3551 MMP1 3' TGACTGAGAAAATAGAC 80535
                                        G A
                    TGAC TGA AAAATAGAT
                    ACTG ACT TTTTATCTG
                      _ C
GAM3551 LOC144866 5' TGATTGAAAAAGCACTAGGTA 80536
                                           CG
                                                ATAG
                    TGA TGAAAAA ATTAGGTA
```

AGAAAGGG CA CA TAGA

```
ACT ACTTTTT TGATCCAT
                          CG
GAM3552 NR2E3 3' TGAGGTCACTGCCGGTTGTC 80539
                                         AC TCC C
                    TGA TCATTGCC GG TGTC
                    ACT AGTGACGG CC ACAG
                      CC
            3' TGGACTCACTGCTGCTGT
GAM3552 PML
                                 80540 A
                                            CTCCG
                    TG ACTCATTGC GCTGT
                    AC TGAGTGACG CGACA
                          A___
GAM3552 SIP
           3' GAATTCATTGCCTTTACT 80541
                                           CCG
                    GAA TCATTGCCT GCT
                    CTT AGTAACGGA TGA
                          AA_
GAM3552 TMEM2 3' TGTACTCATTGCCAGTGT 80542 A
                                             TCC C
                    TG ACTCATTGCC GG TGT
                    AC TGAGTAACGG TC ACA
                     Α
GAM3552 CHDH
             3' TCACTGCCCAGTACTTGTC 80543
                                           CCG
                    TCATTGCCT GCT GTC
                    AGTGACGGG TGA CAG
                        TCA A
GAM3552 FLJ14103 5' TGGGCTCCAGCTGCAGCCTCTG 80544 ATT____ C
                                                        Ш
        GCTGTCG
                         TC
                              GCCTC GGCTGTC G
                    Ш
                        CGGAG CCGACAG C
                    AG
                     GTCGACGT A
                                   Ш
GAM3552 KIAA1046 3' TGAACTCATGTCCAAAATGTC 80545
                                             TGCC C
                    TGAACTCAT TCCGG TGTC
                    ACTTGAGTA AGGTT ACAG
                        C___ TT
GAM3552 SCYA14 5' TGGGCTCACTGCTTCCTGGCT 80546
                                          AΑ
                                               C _
                    TG CTCATTGC TCC GGCT
                    AC GAGTGACG AGG CCGA
                     CC
                          A A
GAM3552 SCYA14 5' TGGGCTCACTGCTTCCTGGCT 80546 AA
                                               С
                    TG CTCATTGC TCC GGCT
                    AC GAGTGACG AGG CCGA
                     CC
                          A A
                                               C _
GAM3552 SCYA15 5' TGGGCTCACTGCTTCCTGGCT 80546
                                          AA
                    TG CTCATTGC TCC GGCT
```

11 11111111 111 1111

```
AC GAGTGACG AGG CCGA
                     CC
                          A A
GAM3552 SCYA23 5' TGGGCTCACTGCTTCCTGGCT 80546 AA C
                    TG CTCATTGC TCC GGCT
                    AC GAGTGACG AGG CCGA
                     CC
                          A A
                                          TCC
GAM3552 TXNL2 3' TGAACTCATGGCTTCTGA 80547
                    TGAACTCAT GC TC GG
                    ACTTGAGTA CG AG CT
                        CAA
GAM3552 WIT-1 5' ACTGCCTCTCCTTCGGCTGTC 80548
                    ATTGCCTC CGGCTGTC
                    TGACGGAG GCCGACAG
                       AGGAA
GAM3552 ZFP95 3' TGAACTCATGAAGCTGT 80549
                                         TGCCTCC
                    TGAACTCAT GGCTGT
                    ACTTGAGTA
                               TCGACA
                        CT
GAM3552 ZFP95 3' TGAACTCATGAAGCTGT 80549
                                         TGCCTCC
                    TGAACTCAT
                               GGCTGT
                    ACTTGAGTA
                               TCGACA
                        CT
GAM3552 LOC134957 3' TGACTTATTGCCTCTGC 80550
                                        A C
                                              CG
                    TGA CT ATTGCCTC GC
                    ACT GA TAACGGAG CG
                     _ A
GAM3552 LOC145371 3' TGGACTCCAGCCCTGGCTGT 80551 A ATT CC
                    TG ACTC GCCT GGCTGT
                    AC TGAG CGGG CCGACA
                     C GT_ A_
GAM3552 LOC151176 3' TCAGCAGGCCCGGCTGTC 80552
                                          TT C
                    TCA GC TCCGGCTGTC
                    AGT CG GGGCCGACAG
                      _ TCC
GAM3552 LOC152897 3' TGGACTCATTAGTCTCTGCT 80553 A
                                              C_ CG
                    TG ACTCATTG CTC GCT
                    AC TGAGTAAT GAG CGA
                     С
                         CA A_
GAM3552 LOC153338 3' GAACTCATTGCTGCCCTGTC 80554
                                              CT GG
                    GAACTCATTGC CC CTGTC
```

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CTTGAGTAACG GG GACAG
                        AC __
GAM3552 LOC201689 3' TCACTGCCCAGTACTTGTC 80543
                                           CCG
                    TCATTGCCT GCT GTC
                    AGTGACGGG TGA CAG
                       TCA A
GAM3553 MYH13 5' TTCCCAAGTGACAGTCAG 80557
                                        ACGAG TA
                    TTCCCGA GACA GTCAG
                    AAGGGTT CTGT CAGTC
                       CA
GAM3553 NFATC1 3' CTCCTGGGCGAGGACACGTCGG 80558
                                           CGAA
                                                   A A
        C
                    TTCC CGAGGACAT GTC GC
                    GAGG GCTCCTGTG CAG CG
                     ACCC
                            С
GAM3553 PRLR 5' TTCCTGCACGAGGACATGAAGC 80559
                                          CGA
                                                 AGTC
                    TTCC ACGAGGACAT AGC
                    AAGG TGCTCCTGTA TCG
                     ACG
                            CT__
GAM3553 TACR1 3' TTCCTGGATGGTGATAATCAGC 80560
                                          CGAAC AC
                    TTCC GA GG ATAGTCAGC
                    AAGG CT CC TATTAGTCG
                     AC A AC
GAM3553 FLJ13725 5' TTCCCGAAGTGAGGGTGTGTC 80561
                                           C ACATA
                    TTCCCGAA GAGG GTC
                    AAGGGCTT CTCC CAG
                       CA CACA
GAM3553 NUDE1 3' TTCTCCAACGAGGAGACA 80562
                                        G
                    TTC CC AACGAGGA ATA
                    AAG GG TTGCTCCT TGT
                     Α_
                          С
GAM3553 NUDT9 5' TTCCCGAACGGGAGTAGC 80563
                                           A CA
                    TTCCCGAACG GGA TAGT
                    AAGGGCTTGC CCT ATCG
                        _ C_
GAM3553 LOC135043 3' CTCCGGATGAGGACACCCAGC 80564
                                            C AC
                                                  AG
                    TTCC GA GAGGACAT TCAGC
                    GAGG CT CTCCTGTG GGTCG
                     CA_{-}
GAM3554 CAPN5 3' TTAGCAGTGGTGACAGTT 80567
                                          AATAA
                    TTAGTAGT GATAGTT
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CCA_
GAM3554 CYB5 3' TAGTAGTGATAAGAGTTT 80568
                                            TΑ
                    TAGTAGT ATAAGA GTTT
                    ATCATCA TATTCT CAAA
GAM3554 VPS26 3' TAGTAGTAAAACAGGTTTAAA 80569
                                            TAA
                    TAGTAGTAA GATAG TTTAAA
                    ATCATCATT TTGTC AAATTT
                            С
GAM3554 ARTS-1 3' AGTCAATAAGATAGTTTAA 80570
                    AGT AATAAGATAGTTTAA
                    TCA TTATTCTATCAAATT
                      G
GAM3554 KIAA0268 3' GTGACCAGATAGTTTAAA 80571 A A
                    GT AT AGATAGTTTAAA
                    CA TG TCTATCAAATTT
                     CG
GAM3554 LATS1 3' TTAGCAGCATCAGATGGTTTA 80572
                                            ATA A
                    TTAGTAGTA AGAT GTTTA
                    AATCGTCGT TCTA CAAAT
                        AG C
GAM3554 LOC153606 5' TAGTACTAAATAGTTTAA 80573
                                          ATA
                    TAGTA AGATAGTTTAA
                    ATCAT TTTATCAAATT
                      GΑ
                                            CCAGT GAC_ _
GAM3555 RSP3 5' TTTGCAGGGCTGGTGTTGGCG 80576
                    TTTGCAGG GC GTTG CG
                    AAACGTCC CG CAAC GC
                         ACCA C
GAM3555 LOC91035 5' TTTGCAGGCCAGGTGGGCGCAA 80577
                                               T ACGT
        CGTCG
                       GCAGGCCAG
                                    GCG TG
                    CGTCCGGTC
                                 CGT GC
                        CACCCIIIG TGCA
GAM3556 KIAA0442 3' ATTTTATTTCATACATATATTT 80580
                                             TT_
                     ATTTTATTTTAT TATATTTTA
        TΑ
                    TAAAATAAAGTA ATATAAAAT
                         TGT
GAM3556 PAPPA 5' TATTTCATTTTATATA 80581
                    TATTTTATTTTATA
```

AATCGTCA CTGTCAA

ATAAAGTAAAATAAAATAT

GAM3556 PCDHB9 3' TTTTAAGTTATTTTATATTTTA 80582 TT TTTTA TTATTTTTA AAAAT AATAAAATATAAAAT TC GAM3556 PCDHB9 3' TATTTTATTTTATTTAT 80583 TATTTTATTTTAT ATAAAATAAAATA GAM3556 PLA2G2D 3' TATTTTATTTTATTTTT 80584 Α Т TATTTTATTTTATTTTTAT ΑΤΑΑΑΑΤΑΑΑΑΤΑ ΑΑΑΑ GAM3556 PLA2G2D 3' TATTTTATTTTATT 80583 **TATTTTATTTTAT** ATAAAATAAAATA GAM3556 PLA2G2D 3' TATTTTATTTTATT 80583 **TATTTTATTTTAT** ATAAAATAAAATA GAM3556 PLA2G2D 3' TATTTTATTTTATTTAT 80583 **TATTTTATTTTAT** ATAAAATAAAATA GAM3556 PLA2G2D 3' TATTTTATTTTATT 80583 TATTTTATTTTATTTAT ATAAAATAAAATA GAM3556 ALS2CR3 3' TTTTATTTTATTTTACATT 80585 TTTTATTTTATTTTATATT AAAATAAAATAAAATGTAA GAM3556 FLJ10989 3' TATTTTATTTATTTATTTATT 80586 TA_ TATTTATTTTATTT TATTTT TT ΑΤΑΑΑΑΤΑΑΑ ΑΤΑΑΑ TAA GAM3556 FLJ10989 3' CATTTTATTTTATT 80587 **TATTTTATTTTAT**

GTAAAATAAAATA

GAM3556 KALI 3' TATTTCATTTTATTTTAT 80588 **TATTTTATTTTAT** ATAAAGTAAAATAAAATA GAM3556 VEGFC 3' CATTTTATTTTAAACATATTTT 80589 TTT TATTTTATTTTA TATATTTT GTAAAATAAAAT GTATAAAA TT GAM3556 ZIM3 3' TATTTTATTTTATCTTAT 80590 **TATTTTATTTTAT ATAAAATAAAATAGAATA** GAM3556 LOC134266 3' ATTTTATTTTATAT 80591 **ATTTTATTTTATA** TAAAATAAAATAT GAM3557 CCND2 3' GGATGTAAGAGTTGGCCAG 80594 T AGA GGATGTAAGA TT TCGG CCTACATTCT AA GGTC C CC GAM3557 KNSL1 3' AGGGTTAAGATTTGAATCGA 80595 AG ATG AGG TAAGATTT ATCGG TCC ATTCTAAA TAGCT CA_{-} CT GAM3557 CLDN15 3' AGGATGTAAGCTCCCGGA 80596 **ATTTAGA** AGGATGTAAG **TCGGA** TCCTACATTC **GGCCT** GAG GAM3557 KIAA1819 3' AGGTGTAAGATTTAAAACAA 80597 Τ AGG TGTAAGATTTAGA CGG TCC ACATTCTAAATTT GTT Т GAM3557 PSMD10 3' GGATATAAGGTACATGGGA 80598 ATT G C GGATGTAAG TA AT GGA

CCTATATTC AT TA CCT
C_ G C

GGAAG

TTAGATC

5' GGATGCAAGATGCACGTGGAAG 80599

GGATGTAAGAT

GAM3557 TCL6

```
CCTACGTTCTA
                                   CCTTC
                          CGTGCA
GAM3557 TCL6 5' GGATGCAAGATGCACGTGGAAG 80599
                                               TTAGATC
                     GGATGTAAGAT
                                   GGAAG
                     11111
                     CCTACGTTCTA
                                   CCTTC
                          CGTGCA
GAM3557 TCL6
             5' GGATGCAAGATGCACGTGGAAG 80599
                                               TTAGATC
                     GGATGTAAGAT
                                   GGAAG
                     Ш
                                   CCTTC
                     CCTACGTTCTA
                          CGTGCA
GAM3557 TCL6
             5' GGATGCAAGATGCACGTGGAAG 80599
                                               TTAGATC
                     GGATGTAAGAT
                                   GGAAG
                     |||||
                     CCTACGTTCTA
                                   CCTTC
                          CGTGCA_
GAM3557 ZIM2 3' AAGATGTAAGATTTACAG 80600
                                             GAT
                     AGGATGTAAGATTTA CGG
                     TTCTACATTCTAAAT GTC
GAM3557 LOC145231 3' AGGAGGTAAGATTAATGGAAG 80601
                                                 TA C
                                             Т
                     AGGA GTAAGATT GAT GGAAG
                     TCCT CATTCTAA TTA CCTTC
                                             _ A
GAM3557 LOC255098 5' GGCATGTGAGATTTACATCAGA 80602
                                                   G
                      GG ATGT AGATTTA ATCGGAAG
         AG
                     CC TACA TCTAAAT TAGTCTTC
                      G C
                            G
GAM3558 CLOCK 5' AGGTATCTAGTGAGACTTGC 80605
                                            CAGA AATA
                     AGGT AGT AGACTTGC
                     TCCA TCA TCTGAACG
                       TAGA C
GAM3558 C9orf14 5' TAGATCAGGAGGACTT
                                          A TAATAA
                                  80606
                     TAGGTCAG AG
                                  GACTT
                     ATCTAGTC TC
                                  CTGAA
                        C _
GAM3558 MAGE-E1 3' CAGGTCAGGAGCTCGACTTG 80607
                                              A AATAA
                     TAGGTCAG AGT GACTTG
                     GTCCAGTC TCG
                                   CTGAAC
                        C AG_
GAM3558 OSMR
             3' TAAGTCAGAAGTTACTTG
                                   80608
                                             AATAAG
                     TAGGTCAGAAGT
                                   ACTTG
```

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ATTCAGTCTTCA TGAAC
                        Α
GAM3558 UXS1 5' GGTCAGAAGTAATCCCTTGC 80609
                                            AAGA
                    GGTCAGAAGTAAT CTTGC
                    CCAGTCTTCATTA GAACG
                         GG
GAM3558 LOC134111 3' GTCCAATAAGACTTG
                                 80610
                                       AGAAG
                    GTC TAATAAGACTTG
                    CAG GTTATTCTGAAC
GAM3558 LOC144363 3' AGGTCAGAAGTAATGAC 80611
                                            AA
                    AGGTCAGAAGTAAT GAC
                    TCCAGTCTTCATTA CTG
GAM3558 LOC148195 5' TAGGTCAGAAGTGATTAAACAG 80612
                                             A A TT
        C
                    TAGGTCAGAAGT AT AGAC GC
                    ATCCAGTCTTCA TA TTTG CG
                        CAT_
GAM3558 LOC91548 3' TAGGTCAGGGGTCGATCTG 80613
                                          AA AATAA C
                    TAGGTCAG GT GA TTG
                    ATCCAGTC CA CT GAC
                       CC G A
GAM3559 ADCY8 5' GGCCGGCGGCGCCCCCGGCCT 80616
                                                _ A
        TC
                     GGCCGGCGGCGCCTC GG CTTC
                    CCGGCCGCCGCGGGG CC GAAG
                          GG
GAM3559 DMPK 3' AGGCGGTGGGCGCGCTT 80617 C C CTC A
                    AGGC GG GGGCGC GG CTT
                    TCCG CC CCCGCG CC GAA
                     _ A ___ _
           3' AGGCCGGTCTCAAACTCTTGGA 80618
                                              GC C
GAM3559 IL11
        CTTC
                      AGGCCGG CGGGC CT GGACTTC
                    TCCGGCC GTTTG GA CCTGAAG
                       AGA A_ A
GAM3559 MEN1 5' GGCGGTGGGCGGCGGCGGCTTC 80619
                                           C C CT A
                    GGC GG GGGCG C CGG CTTC
                    CCG CC CCCGC G GCC GAAG
                     _ A C CC _
GAM3559 MUCDHL 3' AGGTCGGCGGCACCACG 80620 C
                                              Т
                    AGG CGGCGGGCGCC CG
```

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TCC GCCGCCCGTGG GC
                       Α
                            Т
GAM3559 MUCDHL 3' AGGTCGGCGGCACCACG 80620 C
                                                  Т
                     AGG CGGCGGGCGCC CG
                     TCC GCCGCCCGTGG GC
                      Α
                            Т
GAM3559 NEUROD2 5' AGGCGGCGGCGCCCGGCGTCTT 80621
                                                С
                                                     T_ GA
         C
                      AGGC GGCGGGCGCC CG CTTC
                     TCCG CCGCCGCGG GC GAAG
                            CC A
GAM3559 SIAT8E 5' AGGCAGGCGGGGACT
                                   80622
                                          С
                                              CGCCTC
                     AGGC GGCGGG
                                   GGACT
                     TCCG CCGCCC
                                  CCTGA
                       Т
            5' GGCCGCGGCGCGCCGGCTT 80623
GAM3559 ST7
                                            G
                                                C A
                     GGCCG CGGGCGC TCGG CTT
                     CCGGC GCCCGCG GGCC GAA
                           C _
GAM3559 ST7
            5' GGCCGCGGCCGCCGGCTT 80623
                                            G
                                                C A
                     GGCCG CGGGCGC TCGG CTT
                     11111 1111111 1111 111
                     CCGGC GCCCGCG GGCC GAA
                           С
GAM3559 TNFRSF11A 5' AGGCTGGCGGGGCGCCGCGG 80624
                                                    Т
                                              C
                     AGGC GGCGGGCGCC CGG
                     TCCG CCGCCGCGG GCC
                            C
GAM3559 FLJ10157 3' GGCTTGGACACCCCTCGGGCTT 80625
         С
                      GGC GGGCGCC TCGG CTTC
                     CCG CCTGTGG AGCC GAAG
                      AA
                           GG C
GAM3559 GP3ST 3' GGCCGGCGGCCTGGG
                                             GC C
                                    80626
                     GGCCGGCGGC CT GG
                     11111111111 11 11
                     CCGGCCGCCCG GA CC
                          __ C
GAM3559 HSA404617 5' AGGCCGGCTGGGTGTGGCTTC 80627
                                                CGCCTC A
                     AGGCCGGC GGG
                                    GG CTTC
                     TCCGGCCG CCC
                                    CC GAAG
                        A ACA___
GAM3559 LOC118812 5' AGGGTTCCAGCGCCTCGGACTT 80628
                                              CCGGCG
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AGG GGCGCCTCGGACTT

Ш

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CAAGG
GAM3559 LOC133923 5' AGGCCAGACTCACTTTGGGCTT 80629 CGGG CTC A
        С
                     AGGCCGG CGC GG CTTC
                    TCCGGTC GTG CC GAAG
                       TGA AAA C
GAM3559 LOC159199 5' AGGCCGGCGGGTCCCTGCTGGA 80630
                                                CG C_
        CTT
                      AGGCCGGCGGG CCT GGACTT
                    TCCGGCCGCCC GGA CCTGAA
                         AG CGA
GAM3559 LOC219513 3' AGGTCGGCGAGCGCCTCG 80631
                    AGG CGGCGGGCGCCTCG
                    TCC GCCGCTCGCGGAGC
GAM3560 ABCC1 3' GCGTGGGAGTGCAGAGGCTGC 80634 C CAG T C
                    GCG GGGG GCAG GC GC
                    CGC CCCT CGTC CG CG
                     A CA_ TC A
GAM3560 ABCC1 3' GCGTGGGAGTGCAGAGGCTGC 80634
                                           C CAG T C
                    GCG GGGG GCAG GC GC
                    CGC CCCT CGTC CG CG
                      A CA TC A
GAM3560 ABCC1 3' GCGTGGGAGTGCAGAGGCTGC 80634
                                           C CAG T C
                    GCG GGGG GCAG GC GC
                    CGC CCCT CGTC CG CG
                      A CA_ TC A
GAM3560 ADARB1 3' GCCTGGGGCAGACCACCTGC 80635 GC
                                                AGT
                    GC GGGGCAGGC GCC GC
                    CG CCCCGTCTG TGG CG
                     GA
                           G__ A
GAM3560 ADRA1A 5' GCGCGGAGGCGGAGCGC 80636
                                            _ A C
                    GCGCGG GGC GG AGTGC
                    111111 111 11 11111
                    CGCGCC CCG CC TCGCG
                       T C \_
GAM3560 ADRA1A 5' GCGCGGAGGCGGGAGCGC 80636
                                            _ A C
                    GCGCGG GGC GG AGTGC
                    CGCGCC CCG CC TCGCG
                       T C _
                                            _{-} A C
GAM3560 ADRA1A 5' GCGCGGAGGCGGGAGCGC 80636
```

GCGCGG GGC GG AGTGC

TCC

TCGCGGAGCCTGAA

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CGCGCC CCG CC TCGCG
                      T C _
GAM3560 ADRA1A 5' GCGCGGAGGCGGAGCGC 80636
                                         _ A C
                   GCGCGG GGC GG AGTGC
                   CGCGCC CCG CC TCGCG
                      T C
GAM3560 APRT
            5' GCGCGGGACGGCGGGACCGC 80637
                                            _ A AGT
                   GCGCGGGG C GCCGC
                    CGCGCCCC G CCG TGGCG
                      TC CCC
GAM3560 AQP5
            5' GCGCGGGGGGCAGGGGC 80638
                                          CA T
                   GCGCGGGG GGCAG GC
                   CGCGCCCC CCGTC CG
                      C CCC
GAM3560 ARF1 5' GCGCGGGGCACGCCG
                               80639
                                        GGCAG
                   GCGCGGGGCA TGCCG
                   CGCGCCCCGT GCGGC
GAM3560 ARHGEF7 3' GCATGGGGCAGGTCCAC
                                  80640
                                            CAGTG
                                        С
                   GCG GGGGCAGG CCGC
                    CGT CCCCGTCC GGTG
                        Α
GAM3560 ATP1B2 5' GCGCGGGGCGAGTCCG
                                         AGGC G
                                80641
                   GCGCGGGC AGT CCG
                   CGCGCCCCG TCA GGC
                       С
GAM3560 B4GALT7 5' GCATGGGGCAGGCGCTCGC 80642
                                         С
                                             A GC
                   GCG GGGGCAGGC GT CGC
                   CGT CCCCGTCCG CG GCG
                    Α
                         _ A_
GAM3560 BACE2 5' GCGCGGAGGCGCAGAGCCGC 80643
                                          AG T
                   GCGCGG GGC GCAG GCCGC
                    CGCGCC CCG CGTC CGGCG
                      T T
                                          _ AG T
GAM3560 BACE2 5' GCGCGGAGGCGCAGAGCCGC 80643
                   GCGCGG GGC GCAG GCCGC
                   CGCGCC CCG CGTC CGGCG
                      Т __ Т
                                          _ AG T
GAM3560 BACE2 5' GCGCGGAGGCGCAGAGCCGC 80643
                   GCGCGG GGC GCAG GCCGC
```

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CGCGCC CCG CGTC CGGCG
                       т __ т
GAM3560 BAI2
            5' GCGCAGGGTAGGTAGCTGC 80644
                                           C C
                     GCGCGGGG AGG AG TGC
                     CGCGTCCC TCC TC ACG
                        AAG
GAM3560 BCAT1
             5' GCAGGGCAGAGGTGCCA
                                  80645
                                            CA
                     GCGGGGCAGG GTGCCG
                     111111111 111111
                     CGTCCCGTCT CACGGT
                        С
GAM3560 BCR
            5' GCGCGGGGCGGGCGC
                                  80646
                                           A CA
                     GCGCGGGGC GG GTGC
                     CGCGCCCCG CC CGCG
                        С
GAM3560 BCR
            5' GCGCGGGGCGGGCGC
                                  80646
                                          A CA
                     GCGCGGGGC GG GTGC
                     CGCGCCCCG CC CGCG
                        C __
GAM3560 CACNA1B 5' GCGCGGGGCGCCCA
                                            AGGCA
                                   80647
                     GCGCGGGGC GTGCCG
                     ||||||
                     CGCGCCCCG
                                CGCGGT
GAM3560 CAPG
             3' GCATGGGGCAGGAAGACGC 80648
                                              С
                     GCG GGGGCAGG AG TGC
                     CGT CCCCGTCC TC GCG
                          TT
GAM3560 CDH11
             5' GCGCAGGGCAAGCGCTGC 80649
                                              AG
                    GCGCGGGCAGGC TGC
                     CGCGTCCCGTTCG ACG
                          CG
GAM3560 CEBPA
             5' GCGCGGGCGTCGCGCCGC 80650
                                             AGGCA
                     GCGCGGGGC
                               GTGCCGC
                     CGCGCCCCG
                                CGCGGCG
                        CAG
GAM3560 CHGA
             5' GCGCGGGGCTGGGGGCGC 80651
                                            A CA
                     GCGCGGGGC GG GTGC
                     CGCGCCCCG CC CGCG
                        A CC
GAM3560 CKMT1
             3' GCGGGGCAGGTCCAGAGC 80652
                                           С
                                                 Т
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GCG GGGGCAGG CAG GC

```
CGC CCCCGTCC GTC CG
                        AG T
GAM3560 CNTN2 5' GCTGGGGCAGGTGGATGCTGC 80653 GC
                                             CA C
                   GC GGGGCAGG GTGC GC
                   CG CCCCGTCC TACG CG
                    A_
                        ACC A
GAM3560 DIA1
           3' GCGCGGGGCGGTGGCCG 80654
                                        CAG A _
                   GCGCGGG GC GTG CCG
                   CGCGCCCC CG CAC GGC
                      СС
GAM3560 DNMT3A 5' GCGCGGGGCTGGGGGGCTGC 80655
                                          A CAGT C
                   GCGCGGGGC GG GC GC
                   CGCGCCCG CC CG CG
                      A CCC A
GAM3560 DSC2 5' CGCGGGGCGAGGGCCGC
                                80656
                                        CAGT
                   CGCGGGC AGG GCCGC
                   GCGCCCCG TCC CGGCG
                      C ____
GAM3560 DSC2 5' CGCGGGGCGAGGCCGC
                                        CAGT
                                 80656
                   CGCGGGC AGG GCCGC
                   GCGCCCCG TCC CGGCG
GAM3560 EFNA3 3' GCAGCAGGCAGTGCTGC 80657
                                            С
                                      GG
                   GC GGCAGGCAGTGC GC
                   CG TCGTCCGTCACG CG
                                        С
GAM3560 EGLN2 5' GCGTGGGGCAGGGTGAGGC 80658
                                            CA CC
                   GCG GGGGCAGG GTG GC
                   CGC CCCCGTCC CAC CG
                        __ TC
                    Α
GAM3560 EGLN2 5' GCGTGGGGCAGGGTGAGGC 80658
                                        С
                                           CA CC
                   GCG GGGGCAGG GTG GC
                   CGC CCCCGTCC CAC CG
                      __ TC
                    Α
GAM3560 EN1
           5' GCACGGGGCGGGTGC
                               80659
                                       A CA
                   GCGCGGGGC GG GTGC
                   CGTGCCCCG CC CACG
GAM3560 ENG
           3' GCCGGGGCAGCCACCGC 80660 G
                                         GG
```

GC CGGGGCAG CA TGC

11 11111111 11 111

```
CG GCCCCGTC GT GCG
                        GG
GAM3560 ERBB2 5' GCGCGGGGCGCGGGGTGCTGC 80661
                                            A CA C
                   GCGCGGGC GG GTGC GC
                   CGCGCCCG CC CACG CG
                       CG C A
GAM3560 F2RL1 5' GCGCGGGGAATCCGCCGC 80662
                                         C GCAG
                   GCGCGGG AG TGCCGC
                   CGCGCCCC TT GCGGCG
                      AG
GAM3560 F2RL3 3' GCGCGGAGCCACTGCCGC 80663
                                         AGG G
                   GCGCGGGC CATGCCGC
                   CGCGCCTCG GT ACGGCG
                       G
                                        _ A GT
GAM3560 FGF18 5' GCTGCGGGGCGGCAGCCGC 80664
                   GC GCGGGGC GGCA GCCGC
                   CG CGCCCCG CCGT CGGCG
                    Α
GAM3560 FGF18 5' GCTGCGGGGCGGCAGCCGC 80664
                                         A GT
                   GC GCGGGGC GGCA GCCGC
                   CG CGCCCCG CCGT CGGCG
GAM3560 FHIT
           5' GCGCGGGCCGGAGCGCCGC 80665
                                          A C
                   GCGCGGGC GG AGTGCCGC
                   CGCGCCCG CC TCGCGGCG
                       \mathsf{G}_{-}
GAM3560 FLNA
            5' GCCGGGGGGGGGGTGCTGC 80666 G CA A C
                   GC CGGGG GGC GTGC GC
                   CG GCCCC CCG CACG CG
                    _ C_ C A
```

GCGC GGGG GG GTGCCGC

|||| ||| || ||||||
CGCG CCCC CC CGCGGCG

A AC CC

GAM3560 FOXO1A 5' GCCGGGGCAGAGCCTGC 80668 G _ AG

GC CGGGGCAG GC TGC

|| |||||||| || ||
CG GCCCCGTC CG ACG

_ T G_

_ CA CA

GAM3560 FOXE3 3' GCGCTGGGGTGGGGGGCGCCGC 80667

GAM3560 FUS1 3' GCCGGGGCAGGGGTGC 50015 G CA GC CGGGGCAGG GTGC || ||||||||| ||||

CG GCCCCGTCC CACG CC GAM3560 GALGT 5' GCGCGGGGAGGGCTCTGGCCGC 80669 CA AGT GCGCGGG GGC GCCGC CGCGCCCC CCG CGGCG TC AGAC GAM3560 GALNT2 3' GCGGGGCAGGACTCGCTGC 80670 CAG C GCGGGCAGG TGC GC CGCCCGTCC GCG CG TGA A GAM3560 GARP 3' GCCGGGGCAGGACTCACCGC 80671 G CAG GC CGGGGCAGG TGCCGC CG GCCCCGTCC GTGGCG TGA GAM3560 GFRA1 5' GCGCGGGGCTGGTCCCCGC 80672 A CAGTG GCGCGGGGC GG CCGC CGCGCCCCG CC GGCG A AGG GAM3560 GLI4 3' GCTGGGCAGTGCCCACCG 80673 G AG GC GGGCAG GC TGCCG 11 111111 11 11111 CG CCCGTC CG GTGGC A AG GAM3560 GTF2IRD1 5' GCGCGGGGAGGGGGCGC 80674 C CA GCGCGGGG AGG GTGC CGCGCCCC TCC CGCG CC GAM3560 GUCY1A2 5' CGCGGGGCGCTGCGGTCGC 80675 AG A C CGCGGGGC GC GTG CGC GCGCCCCG CG CGC GCG __ A CA GAM3560 HADHSC 5' GCGCGAGGCGGCAGCCGC 80676 A GT GCGCGGGC GGCA GCCGC CGCGCTCCG CCGT CGGCG С

C

GAM3560 HHIP 5' GCGCGGGGAGGTGCG 80677 C CAG C

GCGCGGGG AGG TGC G

CGCGCCCC TCC ACG C

_ A

GAM3560 HIC1 5' GCGCGGGGGCAGCTCG 80678 CAG GC GCGCGGGG GCAGT CG

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CGCGCCCC CGTCG GC
                           \mathsf{A}_{-}
GAM3560 HLX1 5' GCGCGGGGAGGGCGC
                                 80679 C CA
                    GCGCGGGG AGG GTGC
                    CGCGCCCC TCC CGCG
                       _ C_
GAM3560 IGFBP2 3' GCGGGGGGCAGGGGCGC
                                   80680
                                         С
                                             CA
                    GCG GGGGCAGG GTGC
                    111 11111111 1111
                    CGC CCCCGTCC CGCG
                     С
                         С
GAM3560 INPP5A 3' GCGCAGAGTCAGTGCCGC 80681
                                           CAGG
                    GCGCGGG CAGTGCCGC
                    CGCGTCTC GTCACGGCG
GAM3560 INPPL1 3' GCGAGGGCAGGATGC
                                 80682
                                       С
                                            CA
                    GCG GGGGCAGG GTGC
                    CGC CCCCGTCC TACG
                     Т
GAM3560 JAM2
            5' GCGCGGGGCTGCCAGC
                                         AGGCAG
                                 80683
                    GCGCGGGGC
                                TGCC GC
                    CGCGCCCCG
                                ACGG CG
                             Т
GAM3560 JUN
            3' GCGCGGGGACAGCCCG
                                         CAG G
                                 80684
                    GCGCGGGG GCAGT CCG
                    CGCGCCCC TGTCG GGC
                                             _ __ G C
GAM3560 KCNA5 5' GCGCGGGAGCAGAGGGCATGCT 80685
        GC
                     GCGCGGG GCA GGCA TGC GC
                    CGCGCCC CGT CCGT ACG CG
                       T CTC _ A
            5' GCGCGGAGGTGGAACTCGC 80686
GAM3560 KDR
                                           CA CAGT _
                    GCGCGGGG GG GC CGC
                    CGCGCCTC CC TG GCG
                       CA T___ A
GAM3560 LARGE 5' GCGCGGCGCCGCCGC 80687
                                           _ AG AG
                    GCGCGG GGC GC TGCCGC
                    CGCGCC CCG CG GCGGCG
                      G __ _
                                           _ AG AG
GAM3560 LARGE 5' GCGCGGCGCCGCCGC 80687
                    GCGCGG GGC GC TGCCGC
```

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CGCGCC CCG CG GCGGCG
                      G __ _
GAM3560 LETM1 5' GCGGGGCGGCCAGGCCGC 80688
                                           A _ T
                    GCGGGGC GGC AG GCCGC
                    CGCCCCG CCG TC CGGCG
                       _ G _
GAM3560 LMO2
            5' GCGCGGGCTGCCGCTGC 80689
                                            A AGT C
                    GCGCGGGGC GC GC GC
                    CGCGCCCCG CCG CG CG
                        A GC A
GAM3560 MAD1L1 3' GCGGGGCAGGGGACCTGC 80690
                                            CAGT
                    GCGGGCAGG GCC GC
                    CGCCCGTCC TGG CG
                        CC A
GAM3560 MAP3K9 5' GCGCGGGGTCACGTAGTTGC 80691
                                            _ GGC _
                    GCGCGGGG CA AGT GC
                    CGCGCCCC GT TCA CG
                       A GCA A
GAM3560 MAP4K2 5' GCGGGGCGCGCCCG
                                          AAG
                                  80692
                    GCGGGGC GGC GT CCG
                    1111111 111 11 111
                    CGCCCCG CCG CG GGC
                       C _ _
GAM3560 MYO6
            5' GCGCGGCGGCGGGCTACC 80693
                                           _ A_ AG
                    GCGCGG GGC GGC TGCC
                    CGCGCC CCG CCG ATGG
                      G CC _
GAM3560 NFATC2 5' GCGCAGGGCGGGAAGGCTGC 80694
                                             ACTC
                    GCGCGGGC GG AG GC GC
                    CGCGTCCCG CC TC CG CG
                        CT_A
GAM3560 NR2F6 5' GCGCGGGGGGCACGGGCTGC 80695
                                            CA GT_ C
                    GCGCGGGG GGCA GC GC
                    CGCGCCCC CCGT CG CG
                        GCC A
                                            A CA_{-}
GAM3560 NRXN1 5' GCGCGGAGCGGGTGGCTGC 80696
                    GCGCGGGGC GG G TGC
                    CGCGCCTCG CC C ACG
                        CACG
GAM3560 PABPC4 5' GCGCGGGGCAGGCCGGAAGCG 80697
                    GCGCGGGCAGGC AGTG
```

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CGCGCCCCGTCCG TCGC
                           GCCT
GAM3560 PACE 3' GCCGGGGCAAGCTGC
                                              AG
                                  80698 G
                     GC CGGGGCAGGC TGC
                     CG GCCCCGTTCG ACG
GAM3560 PKD1
             5' GCGCGGGCTGGATGGGGCTGC 80699
                                                A CAGT_ C
                     GCGCGGGGC GG GC GC
                     CGCGCCCCG CC CG CG
                         A TACCC A
GAM3560 PPIF
            3' GCACGGGGAAGTTAGTGTTGC 80700
                                             C GC CC
                     GCGCGGGG AG AGTG GC
                     11111111 11 1111 11
                     CGTGCCCC TC TCAC CG
                         T AA AA
GAM3560 PTGS2 5' GCGCGGGGGTAGGCTTTGC 80701
                                              C AG
                     GCGCGGGG AGGC TGC
                     CGCGCCCC TCCG ACG
                         CA AA
GAM3560 RAB3B 5' GCCGGGGCGGGGCGCTGC 80702
                                               A CA C
                                          G
                     GC CGGGGC GG GTGC GC
                     CG GCCCCG CC CGCG CG
                         C __ A
GAM3560 RNH
             5' GCGGCCAGGCAGGCTGC 80703
                                               T C
                                           G
                     GCGGG CAGGCAG GC GC
                     CGCCC GTCCGTC CG CG
                       G
                                               T C
                                           G
GAM3560 RNH
             5' GCGGGCCAGGCAGGCTGC 80703
                     GCGGG CAGGCAG GC GC
                     CGCCC GTCCGTC CG CG
                          _ A
                       G
GAM3560 RPS6KA2 5' GCGCGGGGCGTGGGGCGC 80704
                                               A_ CA
                     GCGCGGGGC GG GTGC
                     111111111 11 1111
                     CGCGCCCCG CC CGCG
                         CA C_
GAM3560 RPS6KA2 5' GCGTGGGGCGCGAGCTGC 80705
                                              AG _ _
                     GCG GGGGC GC AG TGC
                     111 11111 11 11 111
                     CGC CCCCG CG TC ACG
                      A _ C G
GAM3560 SLC22A5 5' GCGCGGGGCACCCGCCGC 80706
                                              AG AG
```

GCGCGGGC GC TGCCGC

```
CGCGCCCG TG GCGGCG
                        __ G_
GAM3560 SLC30A4 5' CGAGGGCAGTGCCGC
                                  80707
                                         CAG
                     CGGGG GCAGTGCCGC
                     GCTCC CGTCACGGCG
GAM3560 SLC9A3R2 3' GCTCGGGGCAGGCTGAGGC 80708 G
                                              __ T
                     GC CGGGGCAGGC AG GC
                     11 1111111111 11 11
                     CG GCCCCGTCCG TC CG
                          AC _
                     Α
GAM3560 SMT3H1 5' GCGCGGGGAGGCGCGC 80709
                     GCGCGGGG AGGC GTGC
                     11111111 1111 1111
                     CGCGCCCC TCCG CGCG
                        С
GAM3560 SOX12 3' GCGTGGGGCAGAGACCTGC 80710
                                               CAGT _
                     GCG GGGGCAGG GCC GC
                     CGC CCCCGTCT TGG CG
                      Α
                          C___ A
GAM3560 SREBF2 5' ACGCGGGGGCGTGCCG
                                            CAG A
                                    80711
                     GCGCGGG GC GTGCCG
                     TGCGCCCC CG CACGGC
                        С
GAM3560 ST14
            5' GCGCGGGGCGCGGGGCGC 80712
                                            A CA
                     GCGCGGGGC GG GTGC
                     CGCGCCCCG CC CGCG
                        CG C_
GAM3560 SURF4 3' GCTGGGAAAGGGCGGTGCTGC 80713 GC CA A C
                     GC GGGG GGC GTGC GC
                     CG CCCT CCG CACG CG
                     A_ TTC C A
GAM3560 TNFRSF11A 5' GCGCGGGACAGGCTGGC
                                               AGT
                                     80714
                     GCGCGGGGCAGGC GC
                     CGCGCCCTGTCCG CG
                          AC_
GAM3560 TRC8
             5' GCGCGGGCCAGGGCCCGGGGCC 80715
                                                _ AGT__
        GC
                      GCGCGGGCAGG C GCCGC
                     CGCGCCCGTCC G CGGCG
                         C GGCCC
                                                 CAG __
GAM3560 TRPV4
             3' GCTGGGGCAGGGGTCACGTCGC 80716
                                            GC
                     GC GGGGCAGG TGC CGC
```

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CG CCCCGTCC GTG GCG
                     A_
                         CCA CA
GAM3560 VHL
                                         A C
           5' ACGCGGGGCGGAGCTGC
                               80717
                    GCGCGGGGC GG AG TGC
                    TGCGCCCCG CC TC ACG
                       _ _ G
GAM3560 WNT4
            5' GCCCGGGCAGCGGCTGC 80718 G _ AG
                    GC CGGGGCA GGC TGC
                    CG GCCCCGT CCG ACG
                    G
                        CG
GAM3560 WNT7A 5' GCGGGGGCGCTGCTGC
                                80719
                                          AG AG C
                    GCG GGGGC GC TGC GC
                    CGC CCCCG CG ACG CG
                       Α
GAM3560 XRCC2 3' CACTGATGGGCAGTGCTGC 80720
                                        GG CA
                                                C
                    CGC GG GGCAGTGC GC
                    GTG CT CCGTCACG CG
                     A_ AC
                            Α
GAM3560 YWHAG 5' GCGCGAGGCGGCTGC
                                         A AG
                                 80721
                    GCGCGGGGC GGC TGC
                    CGCGCTCCG CCG ACG
GAM3560 ALTE
            5' GCGCGGGGGGGGCGCTGC 80722
                                          CA A
                    GCGCGGGG GGC G TGC
                    CGCGCCCC CCG C ACG
                       C_C CG
GAM3560 APELIN 5' CGCGGGGCAGCGCCGC
                                         GGCA
                                 80723
                    CGCGGGGCA GTGCCGC
                    GCGCCCCGT CGCGGCG
GAM3560 ASE-1 5' GCGCGGGGGTAGGCATTGC 80724
                                          C_ G
                    GCGCGGGG AGGCA TGC
                    CGCGCCCC TCCGT ACG
                       CA A
                                            C C_ _
GAM3560 ATP6V1B2 3' GCACGGGGTAGGGAAGTTGC 80725
                    GCGCGGGG AGG AGT GC
                    CGTGCCCC TCC TCA CG
                       A CT A
                                           CA CA CC_
GAM3560 BTBD2 3' ACGCGGGGTGGGTGGGGC 80726
                    GCGCGGGG GG GTG GC
```

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TGCGCCCC CC CAC CG
                        A_ __ CCC
GAM3560 CAMKK1 3' GCGCGGGATGAGTGTGCTGC 80727
                                              CA CA C
                     GCGCGGGG GG GTGC GC
                     CGCGCCCT TC CACG CG
                        AC A A
GAM3560 CDCA4 5' GCGCGGGGCGGGCGAGC 80728
                                              A_ _
                     GCGCGGGC GGC AGT
                     11111111 111 111
                     CGCGCCCCG CCG TCG
                        CC C
GAM3560 CENTG2 5' GCGCGGGGCTGGCCCG
                                    80729
                                             A AGTG
                     GCGCGGGGC GGC CCG
                     CGCGCCCG CCG GGC
                         Α
GAM3560 CEP3 5' GCGCGGGGCCGGGCCG
                                   80730
                                           A CAGT
                     GCGCGGGGC GG GCCG
                     CGCGCCCCG CC CGGC
                        C __
GAM3560 CEP3 5' GCGCGGGGCGGCCGGACGC 80731
                                             A AGTGC
                     GCGCGGGGC GGC
                                   CGC
                     CGCGCCCCG CCG GCG
                        _ GCCT_
GAM3560 CHRAC1 3' GCTAAAAGCGGGCAGTGC 80732
                                          GC
                     GC GGGGC GGCAGTGC
                     CG TTTCG CCGTCACG
                      ΑT
                         С
                                                 CA
GAM3560 COL12A1 3' CGTGGGGCAGGGCGCCGC 80733 C
                     CG GGGCAGG GTGCCGC
                     GC CCCCGTCC CGCGGCG
                      Α
                          CG
GAM3560 COL12A1 3' CGTGGGGCAGGGCGCGCCGC 80733
                                                 CA
                                            С
                     CG GGGGCAGG GTGCCGC
                     11 11111111 1111111
                     GC CCCCGTCC CGCGGCG
                          CG
GAM3560 DDX17 5' GCTCAAACCGGGCAGTGCCGC 80734
                                           G A
                     GC GGGC GGCAGTGCCGC
                     11 1111 1111111111
                     CG TTTG CCGTCACGGCG
                      AG GC
GAM3560 dJ383J4.3 5' ACGCGGGGCGGGCCCTGC 80735
                                             A AG
                     GCGCGGGC GGC TGC
```

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TGCGCCCG CCG ACG
```

C GG CA AG C GAM3560 DKFZp434F054 5' GCGCGGGGGGGGGCGCTGC 80736 GCGCGGGG GGC TGC GC CGCGCCCC TCG GCG CG C CCT A GAM3560 DKFZP434J154 5' GCGCGAGGGCGGGTCAGGCTGC 80737 _ A _ T C GCGCG GGGC GG CAG GC GC CGCGC CCCG CC GTC CG CG T C A A GAM3560 DKFZp434K2435 5' GCGCGGGGCGCGGGGCGACTGC 80738 A CA C GCGCGGGC GG GTG C GC CGCGCCCG CC CGC G CG CG C TA GAM3560 DKFZP434N014 5' GCGCGGGGTGTGGGCGGTGCCG 80739 CA__ A C GCGCGGG GGC GTGCCGC CGCGCCCC CCG CACGGCG ACAC C GAM3560 DKFZP564I1171 5' GCGCGGGGCGCGCGC A A 80740 GCGCGGGC GGC GTGC CGCGCCCCG CCG CGCG С GAM3560 DKFZp762K222 5' GCGCGGCGGCAGCGCTGC 80741 G A C GCG GGC GGCAGTGC GC CGC CCG CCGTCGCG CG G _ GC GAM3560 DLL1 3' ACGGAAGGCAGTGCCG 80742 GCGGG AGGCAGTGCCG TGCCT TCCGTCACGGC GAM3560 DMWD 5' GCGCAGGGGTGGCTGACG 80743 CA AG C GCGCGGGG GGC TG CG 11111111 111 11 11 CGCGTCCC CCG AC GC CA __ T GAM3560 E2IG3 5' GCGCGGAGCAGGGATCGC 80744 CAG GCGCGGGGCAGG TGC CGCGCCTCGTCC GCG CTA GAM3560 EIF3S9 3' GCGCAGGAGAAGGTGCCGC 80745 C CA GCGCGGG AGG GTGCCGC

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CGCGTCCT TTC CACGGCG
                        С
GAM3560 EPB41L1 5' CGCGGGGCGGGGGGGCGC 80746
                                             A A
                     CGCGGGGC GGC GTGC
                    GCGCCCCG CCG CGCG
                        CC C
GAM3560 FLJ10769 3' GCGTGGGACAGGAGGC
                                   80747
                                         С
                                           СТ
                     GCG GGGGCAGG AG GC
                     111 11111111 11 11
                     CGC CCCTGTCC TC CG
GAM3560 FLJ12242 5' ACGCGGGGCAGGCCGGGAGC 80748
                                                AGT
                     GCGCGGGGCAGGC GC
                     TGCGCCCCGTCCG CG
                          GCCCT
                                            G C
GAM3560 FLJ12443 3' GCGCTGGGAGGCAGTGCTGC 80749
                                                   C
                     GCGC GGG AGGCAGTGC GC
                     CGCG CCC TCCGTCACG CG
                      A _ A
GAM3560 FLJ12526 5' CGGGGCAGCGCGCTGC
                                           GA C
                                   80750
                     CGGGGCAG C GTGC GC
                     GCCCCGTC G CGCG CG
                        __ A
GAM3560 FLJ12697 3' GCGCGGGGGCTGCTGGGGCGGT 80751
                                             _ A____ A
                                                        Ш
        GCCGCG
                        GGGG C GGC GTGCCGC G
                     CCCC G CCG CACGGCG C
                      C ACGACC C
                                  Ш
                                            CC_
GAM3560 FLJ13189 5' GCGCGGGGAGGAGTTGC
                                   80752
                    GCGCGGGG AGG AGT GC
                     CGCGCCCC TCC TCA CG
GAM3560 FLJ14154 3' GCTGGGGCAGGGTGGCGCCGC 80753
                                           GC
                                                 CA
                     GC GGGGCAGG GTGCCGC
                     CG CCCCGTCC CGCGGCG
                     A_
                          CAC
GAM3560 FLJ14668 3' GCTGGGGCAGGAACACTGC 80754
                                          GC
                                               __ G
                     GC GGGGCAGG CA TGC
                     CG CCCCGTCC GT ACG
                          TT G
                     Α_
GAM3560 FLJ14708 5' GCGTGGGGCTGCCCGGGCCGC 80755
                                           C AG AGT
                    GCG GGGGC GC GCCGC
```

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CGC CCCCG CG CGGCG
                      A A_ GGCC
GAM3560 FLJ20309 3' GCTGGGGCAGAGAACTGC 80756 GC
                                              C
                     GC GGGGCAGG AG TGC
                     CG CCCCGTCT TT ACG
                      \mathsf{A}_{-}
                          CG
GAM3560 FLJ20464 3' GCAGGACAGGTGCTGC
                                             CAG C
                                   80757
                     GCGGGCAGG TGC GC
                     1111111111 111 11
                     CGTCCTGTCC ACG CG
GAM3560 FLJ20539 3' GCGGGGGCAGGCGAGAGGC 80758
                                                 _ T_
                     GCG GGGGCAGGC AG GC
                     CGC CCCCGTCCG TC CG
                           C TC
GAM3560 FLJ20898 3' GCGCAGGGCAGCCTCGC 80759
                                              G AG
                     GCGCGGGGCAG C TGC
                     CGCGTCCCGTC G GCG
                          _{\rm GA}
GAM3560 FLJ21195 3' GCGCGGGGCTGAGCTGC
                                     80760
                                             A AG
                     GCGCGGGC GGC TGC
                     CGCGCCCCG TCG ACG
                         AC
GAM3560 FLJ21562 5' GCGCTGGGTAAACGCCGC 80761
                                          G C AGT
                     GCGC GGG AGGC GCCGC
                     CGCG CCC TTTG CGGCG
                       A A
                                               CA _ C
GAM3560 FLJ21865 3' GCGCGGGGGGCAGGTGCTGC 80762
                     GCGCGGG GGCAG TGC GC
                     CGCGCCCC CCGTC ACG CG
                         __ C A
GAM3560 FLJ22362 5' GCGCGGGGCCGAGCTGC 80763
                                              A_ AG
                     GCGCGGGGC GGC TGC
                     111111111 111 111
                     CGCGCCCCG TCG ACG
                         GC _
GAM3560 FLJ22814 3' GCGTGGGGCAAGAGTTTTGC 80764 C
                                                 C GCC
                     GCG GGGGCAGG AGT GC
                     CGC CCCCGTTC TCA CG
                          _ AAA
GAM3560 FLJ23519 5' GCGGGCCAGGCAGGCTGC 80703
                                            G
                                                TC
                     GCGGG CAGGCAG GC GC
```

```
CGCCC GTCCGTC CG CG
                         _ A
GAM3560 FLJ31762 3' GCGCAGGGGTGGAGGCC 80765 CA C T
                    GCGCGGGG GG AG GCC
                    CGCGTCCC CC TC CGG
                        CA _ _
            3' GCGGGCAGGGTCCCTCAGTGC 80766
GAM3560 HRD1
                                                    C III
        TGCG
                       GGGGCAGG CAGTGC GC G
                          CCCCGTCC GTCACG CG C
                        CAGGGA A III
GAM3560 HRH3
             5' ACGCGGGGCAGGCGC
                                  80767
                                            CA
                    GCGCGGGGCAGG GTGC
                    TGCGCCCCGTCC CGCG
GAM3560 HSPB7 3' GCACGGGGTGGGCAGGC 80768
                                           CA T
                    GCGCGGGG GGCAG GC
                    CGTGCCCC CCGTC CG
                        AC
GAM3560 HSPC121 5' GCGCGGGGAGGCTAGGCTCGC 80769
                                              C _ T _
                    GCGCGGG AGGC AG GC CGC
                     CGCGCCCC TCCG TC CG GCG
                       _ A _ A
GAM3560 IL-17RC 3' ACGCGGGGCGCGAGGCTGC 80770
                                             __ AG
                    GCGCGGGC AGGC TGC
                    TGCGCCCG TCCG ACG
                        CGC
GAM3560 IL10RB 3' GCTGGAGTGCAGTGCCGC 80771 GC CAG
                    GC GGGG GCAGTGCCGC
                    CG CCTC CGTCACGGCG
                     A_ A__
            5' GCCGGGGCAGGCACGC
GAM3560 JDD1
                                 80772 G
                                             G
                    GC CGGGGCAGGCA TGC
                     11 111111111111111111
                     CG GCCCCGTCCGT GCG
GAM3560 KIAA0125 3' GCCTGGGGCAGGTCTCAGGC 80773 GC
                                                ___ T
                    GC GGGGCAGG CAG GC
                    CG CCCCGTCC GTC CG
                     GΑ
                          AGA _
GAM3560 KIAA0171 5' GCGCGGGACGGTCCGCCGC 80774
                                             A CAG
```

GCGCGGGC GG TGCCGC

```
CGCGCCCTG CC GCGGCG
                        _ AG_
GAM3560 KIAA0346 3' GCGCGGGCAGGCAGGC
                                   80775 G T
                    GCGCGGG CAGGCAG GC
                    CGCGCCC GTCCGTC CG
GAM3560 KIAA0476 5' ACGCGGGGACTGTGCTGC 80776
                                            CAG A C
                    GCGCGGGG GC GTGC GC
                    TGCGCCCC TG CACG CG
                        _ A A
GAM3560 KIAA0513 5' GCGTGGTGGCAGGTGCC 80777
                                         С
                                              CAG
                    GCG GG GGCAGG TGCC
                    CGC CC CCGTCC ACGG
                      A
GAM3560 KIAA0552 5' GCCGGGGCAGGGGACGC 80778 G
                                              CA
                    GC CGGGGCAGG GTGC
                    CG GCCCCGTCC TGCG
                         CC
GAM3560 KIAA0649 5' GCGCGGGGAGGGGGCGC
                                            C CA
                                    80674
                    GCGCGGGG AGG GTGC
                    CGCGCCCC TCC CGCG
                       _ CC
GAM3560 KIAA0720 3' GCGCTGGGCTGCCTGCTGC 80779
                                           G AG AG C
                    GCGC GGGC GC TGC GC
                    CGCG CCCG CG ACG CG
                      A \quad A \quad G \quad A
                                          _ A AG
GAM3560 KIAA0783 5' GCGCGAGGGCGGCTGC
                                   80780
                    GCGCG GGCC GGC TGC
                    CGCGC CCG CCG ACG
                      T _ _
GAM3560 KIAA1026 3' GCGCAGGGCAGGCAGGACTCG 80781
                                                  TG _
                    GCGC GGGGCAGGCAG C CG
                     CGCG CCCCGTCCGTC G GC
                      Т
                           CT A
GAM3560 KIAA1032 3' GCGCAGGCGCAGTGCCGC 80782
                                            G AG
                    GCGCGGG C GCAGTGCCGC
                    CGCGTCC G CGTCACGGCG
GAM3560 KIAA1036 3' GCGGGGGCAGACTGC
                                  80783
                                        С
                                             AG
                    GCG GGGGCAGGC TGC
```

CGC CCCCGTCTG ACG

```
GTC
GAM3560 KIAA1157 5' GCGCGGGGCATGCAGGCTGC 80784
                    GCGCGGGCA GCAG GC GC
                    CGCGCCCCGT CGTC CG CG
                        A _ A
GAM3560 KIAA1533 5' GCGCGGGGCTGGCTGC
                                  80785
                                           A_ AG
                    GCGCGGGGC GGC TGC
                    CGCGCCCG CCG ACG
                       AC
GAM3560 KIAA1576 5' GCGCGGGGCGCACGGGCTGC 80786
                                             AG GT C
                    GCGCGGGC GCA GC GC
                    CGCGCCCCG CGT CG CG
                       __ GCC A
GAM3560 KIAA1643 5' GCGCGGGGCAGGTGC
                                 80787
                                           CAG
                    GCGCGGGCAGG TGC
                    CGCGCCCCGTCC ACG
GAM3560 KIAA1706 3' GCGTGGGGCAAGGCCTCAAGTG 80788
                                         C
                    GCG GGGGCA GGC AGTGC
        С
                    CGC CCCCGT CCG TCACG
                     A T GAGT
GAM3560 KIAA1796 5' GCGCGGGGCTGGAGAGCCGC 80789
                                            ACT
                    GCGCGGGC GG AG GCCGC
                    CGCGCCCCG CC TC CGGCG
                       A _ T
GAM3560 KIAA1813 5' GCTGGGGCAGGAGCTGC
                                             С
                                  80790 GC
                    GC GGGGCAGG AG TGC
                    CG CCCCGTCC TC ACG
                     A_ G
GAM3560 KIAA1872 5' GCGCGGGGCTGCGGCTGC 80791
                                           A__ AG
                    GCGCGGGGC GGC TGC
                    CGCGCCCCG CCG ACG
                       ACG _
GAM3560 LIG-1 5' GCCGAGGGCAGTGCTGC 80792 G CA
                                             C
                    GC GGG GGCAGTGC GC
                    11 111 11111111 11
                    CG CTC CCGTCACG CG
                     G ___
                          Α
GAM3560 LIM
           5' GCGCGGGCTGCCTCCGC 80793
                                         AG AGTG
                    GCGCGGGC GC CCGC
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CGCGCCCG CG GGCG
                       A_ GA__
GAM3560 LRP16 5' GCGCGGGACGGCTCTCCGC 80794
                                        A AGTG
                    GCGCGGGGC GGC CCGC
                    CGCGCCCTG CCG GGCG
                       _ AGA_
GAM3560 LW-1 5' ACGGGGTGTGGGTGGGCGGTGC 80795
                                           CA____ A III
                      GGGG GGC GTGCCGC G
        CGCG
                    CCCC CCG CACGGCG C
                     ACACCCAC C III
GAM3560 MGC:5244 3' GCGCGGGGTGAGGTCCGGGGGC 80796
                                              C_ CAGT___
        CGC
                      GCGCGGG AGG GCCGC
                    CGCGCCCC TCC
                                  CGGCG
                       AC AGGCCCC
GAM3560 MGC10772 5' GCGCGGGGCGCGCGC
                                  80797
                                           AG A
                    GCGCGGGC GC GTGC
                    CGCGCCCCG CG CGCG
GAM3560 MGC10911 3' GCGCGGGGCGGCTGC
                                           A AG
                                  80798
                    GCGCGGGGC GGC TGC
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                    CGCGCCCG CCG ACG
GAM3560 MGC13170 5' GCCGGGTGGGCAGTGCCG 80799 G GCA
                    GC CGGG GGCAGTGCCG
                    CG GCCC CCGTCACGGC
                     _ AC_
GAM3560 MGC16202 5' GCGCGGGGCGCGTGGTGC 80800
                                            AG A
                    GCGCGGGC GC GTGC
                    CGCGCCCCG CG CACG
                       __ CAC
GAM3560 MGC1842 3' GCGGGGGCACAGCTGC
                                        C AG _
                                  80801
                    GCG GGGGC GCAG TGC
                    111 11111 1111 111
                    CGC CCCCG TGTC ACG
                     _ _ G
GAM3560 MGC2555 5' GCGCGGGGCGGGCTCGGGGCTG 80802
                                             A AGT__ C
        С
                     GCGCGGGC GC GC GC
                    CGCGCCCG CCG CG CG
                       C AGCCC A
GAM3560 MOT8 5' GCGCGGGGCGAGGGCGCCG 80803
                                            _ CA
                    GCGCGGGC AGG GTGCCG
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CGCGCCCG TCC CGCGGC
                        С
            3' GCGCGGGGAAGAACCTGC 80804
                                          C AG
GAM3560 MSC
                    GCGCGGGG AGG C TGC
                    CGCGCCCC TCT G ACG
                       TTG
GAM3560 NEIL1 5' GCGGGGGCAGGTCTGAGGC 80805
                                         C C__ T
                    GCG GGGGCAGG AG GC
                    CGC CCCCGTCC TC CG
                         AGAC
GAM3560 NEIL2 5' GCGTGGGCAGCACCTCCGC 80806
                                            G GTG
                    GCG GGGCAG CA CCGC
                    CGC CCCGTC GT GGCG
                     A GGA
GAM3560 PELI2 5' GCGCGGGGCGGCCAGTCCCGC 80807
                                           A _ G
                    GCGCGGGC GGC AGT CCGC
                    CGCGCCCCG CCG TCA GGCG
                        _{\rm G} G G
GAM3560 PPP1R1B 5' GCGCGGGGTGGGCGGTGGGC 80808
                                              CA A CC
                    GCGCGGGG GGC GTG GC
                    CGCGCCCC CCG CAC CG
                       AC C CC
GAM3560 PTPRU 5' GCGCGGAGCGGGACTGGCGC 80809
                                             A _ A_
                    GCGCGGGC GG C GTGC
                    CGCGCCTCG CC G CGCG
                        CTAC
GAM3560 PTPRU 5' GCGCGGAGCGGGACTGGCGC 80809
                                             A _ A_
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                        CTAC
GAM3560 PTPRU 5' GCGCGGAGCGGGACTGGCGC 80809
                                             A _ A_
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                    CGCGCCTCG CC G CGCG
                        CTAC
GAM3560 QKI
           5' GCGCGGGCGCGGGCTGC 80810
                                          A__ AG
                    GCGCGGGC GGC TGC
                    CGCGCCCCG CCG ACG
                        CGC _
GAM3560 Rab11-FIP3 5' GCGCGGGCCCCGGGCTGC 80811
                                              A AG
                    GCGCGGGC GGC TGC
```

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CGCGCCCCG CCG ACG
                       CGGGC _
GAM3560 RAB40C 3' GCGCGGGTAGTGTTGATGCCG 80812 GC GCA
                    GCGCGGG AG GTGCCG
                    CGCGCCC TC TACGGC
                      A ACAAC
GAM3560 RBPMS 5' GCGCGGGGCTGGGCGAGGGC 80813
                                         A_ _ T
                    GCGCGGGC GGC AG GC
                    111111111 111 11 11
                    CGCGCCCG CCG TC CG
                       AC C C
GAM3560 RELB 5' GCGCGGGGCCGGCCG
                                80814
                                         A CAGT
                    GCGCGGGGC GG GCCG
                    CGCGCCCCG CC CGGC
                       G _
GAM3560 REPRIMO 3' GCGTGGGAGCGGTTGCCGC 80815 C A CAG
                    GCG GGG GC GG TGCCGC
                    CGC CCC CG CC ACGGCG
                     A T _ A__
GAM3560 RIN3 5' GGCGGGGCGGGACCTGCTGC 80816 C A AG C
                    G GCGGGGC GGC TGC GC
                    C CGCCCCG CTG ACG CG
                       CCC G_ A
GAM3560 RIP5
           5' GCGCGGGCGGCTGC 80798
                                       A AG
                    GCGCGGGGC GGC TGC
                    CGCGCCCG CCG ACG
GAM3560 SDCCAG8 3' GCGGGGACAGCGCCCGC 80817
                                          CAG
                    GCGGGG GCAGTGCC GC
                    CGCCCC TGTCGCGG CG
                           G
GAM3560 SEC61A1 5' GCGCGGGGCGGGCCG
                                          A CAGT
                                  80730
                    GCGCGGGGC GG GCCG
                    CGCGCCCCG CC CGGC
                       С
GAM3560 SEPT1 3' GCGCGAGGGCGCACCCGC 80818
                                         _ A GTG
                    GCGCG GGGC GGCA CCGC
                    CGCGC CCCG CCGT GGCG
                     T _ G__
GAM3560 SMARCF1 5' CGCGGGGCTCCGCTGCTGC 80819
                                           AG_ AG C
                    CGCGGGGC GC TGC GC
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GCGCCCCG CG ACG CG
                      AGG __ A
GAM3560 SMARCF1 5' CGCGGGGCTCCGCTGCTGC 80819
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                   CGCGGGGC GC TGC GC
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                      AGG __ A
GAM3560 SMARCF1 5' CGCGGGGCTCCGCTGCTGC 80819
                                           AG_ AG C
                   CGCGGGC GC TGC GC
                   GCGCCCCG CG ACG CG
                      AGG A
GAM3560 SMARCF1 3' GCGCGCGGGCAGCCCGCCGC 80820
                                              G AG
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                   CGCGC CCCGTC G GCGGCG
                     G G
GAM3560 SPRY1 5' GCGCAGGGGCGGCCACATTGC 80821
                                         _ A AG___
                   GCGC GGGC GGC TGC
                   CGCG CCCG CCG ACG
                     T _ GTGTA
GAM3560 SPRY4 5' GCCGGGGCAGGTTAGCCGC 80822 G
                                            CAGT
                   GC CGGGGCAGG GCCGC
                   CG GCCCCGTCC CGGCG
                        AAT
GAM3560 SSI-3 5' GCGCGGCGGCGGCTGC 80823
                                       _ A AG
                   GCGCGG GGC GGC TGC
                   CGCGCC CCG CCG ACG
                      G _ _
GAM3560 STRAIT11499 5' GCCGGGGCAGGCCAGGGC 80824 G
                                              Т
                   GC CGGGGCAGGC AG GC
                   CG GCCCCGTCCG TC CG
                        GC
GAM3560 TOB2 5' GCGCGGGGCGGAGGTCGC 80825
                                      A C TGC
                   GCGCGGGGC GG AG CGC
                    CGCGCCCCG CC TC GCG
                       _ _ CA_
GAM3560 XT2
           5' GCGCGGGGCTGAGCCG 80826
                                       A CAGT
                   GCGCGGGGC GG GCCG
                   CGCGCCCCG CT CGGC
GAM3560 ZNF213 3' GCGGGTCATTAGTGCCGC 80827
                                        G GGC
                   GCGGG CA AGTGCCGC
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CGCCC GT TCACGGCG
                      A AA
GAM3560 ZNF313 3' GCGCGAGGTAGCACTTGC 80828
                                          CA G
                    GCGCGGGG GGCA TGC
                    CGCGCTCC TCGT ACG
                       A GA
GAM3560 LOC112703 5' GCCCGGGGCAGCGGCTGC 80718 G AG
                    GC CGGGGCA GGC TGC
                    CG GCCCCGT CCG ACG
                     G
                         CG
GAM3560 LOC116349 3' GCACGGGGCAGGGCTCC 80829
                                             CA G
                    GCGCGGGGCAGG GT CC
                    CGTGCCCCGTCC CG GG
GAM3560 LOC122401 3' GCGGGGCAGGCATCCG
                                   80830
                                            GTG
                    GCGGGGCAGGCA CCG
                    CGCCCGTCCGT GGC
                         Α _
GAM3560 LOC124045 3' GCGGGGGCAGGCCTGGTGC 80831
                                           С
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                    CGC CCCCGTCCG CACG
                         GAC
GAM3560 LOC124045 3' GCGGGGGCAGGCCTGGTGC 80831
                                           С
                                               Α
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                    CGC CCCCGTCCG CACG
                         GAC
GAM3560 LOC126299 5' GCGCGGGGGGCGCCG
                                           CA AGT
                                  80832
                    GCGCGGGG GGC GCCG
                    CGCGCCCC CCG CGGC
GAM3560 LOC130497 3' GCGGGGCTCTGAAGTGCCGC 80833
                                             AGGC_
                    GCGGGGC AGTGCCGC
                    CGCCCCG TCACGGCG
                       AGACT
GAM3560 LOC130985 3' GCAGAGGGCAGTGCG
                                  80834
                                         CA
                                              С
                    GCGGGG GGCAGTGC G
                    CGTCTC CCGTCACG C
                                             C C ^-
GAM3560 LOC145173 5' GCGCGGGGAAGGGAGACGC 80835
                    GCGCGGG AGG AG TGC
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CGCGCCCC TCC TC GCG
                        TCT
GAM3560 LOC145173 5' GCGCGGGGAGCGGAGCTGC 80836
                                              CA C
                     GCGCGGGG GG AG TGC
                    CGCGCCCC CC TC ACG
                        TCG G
GAM3560 LOC145497 5' GCTTGGCAGAGCAGTGCTGC 80837 GG C
                    GC GGCAG GCAGTGC GC
                     CG CCGTC CGTCACG CG
                     AA T A
GAM3560 LOC145501 3' GCTGGGCGGCCAGTGTGCTGC 80838 G A A___ C
                    GC GGGC GGC GTGC GC
                    CG CCCG CCG CACG CG
                     A GTCA A
GAM3560 LOC145773 5' GCGGGGGGTGGCCGCCGC 80839 C CA A
                     GCG GGGG GGC GTGCCGC
                     CGC CCCC CCG CGCGGCG
                      C AC _
GAM3560 LOC146108 5' GCGCGGGAGCTTGCGTGCTGC 80840
                                              AG A C
                     GCGCGGG GC GC GTGC GC
                     CGCGCCC CG CG CACG CG
                       \mathsf{T} \mathsf{A} \mathsf{A} \ \mathsf{A}
GAM3560 LOC146226 5' ACGTGGGCTACAGGTGCTGC 80841
                                            _ AG _ C
                    GCG GGGC GCAG TGC GC
                     TGC CCCG TGTC ACG CG
                      A A_ C A
GAM3560 LOC146325 3' GCGGGGCAGGTCCCAGGC 80842
                                               T
                    GCGGGCAGG CAG GC
                    CGCCCCGTCC GTC CG
                        AGG _
GAM3560 LOC148534 5' GCGCTGGCCAGTGCCG
                                          GG AGG
                                    80843
                     GCGC GGC CAGTGCCG
                     CGCG CCG GTCACGGC
                      A_ _
GAM3560 LOC149422 3' GCGCGGAGGCGGGAGCGC 80636
                                             A C
                     GCGCGG GGC GG AGTGC
                     CGCGCC CCG CC TCGCG
                       T C _
                                            G G _
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GAM3560 LOC150095 5' GCGCTGGGCAGCAGGTTGC 80844

GCGC GGGCAG CAG TGC

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CGCG CCCGTC GTC ACG
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A _ CA GAM3560 LOC150207 3' GCGCGGGGTGAGGTCCGGGGGC 80796 C CAGT CGC GCGCGGG AGG GCCGC CGCGCCCC TCC CGGCG AC AGGCCCC GAM3560 LOC150577 3' GCGCGGGGAAGCTGC 80845 C AG GCGCGGGG AGGC TGC 11111111 1111 111 CGCGCCCC TTCG ACG GAM3560 LOC151516 5' GCAGAGGCAGGCAGTGC 80846 GCG GGGGCAGGCAGTGC CGT CTCCGTCCGTCACG GAM3560 LOC152189 5' GCGCGGGGGAGGGGAGCGC 80847 СС GCGCGGGG AGG AGTGC CGCGCCCC TCC TCGCG C CC GAM3560 LOC152189 5' GCGCGGGGCAGGAGGTGC 80848 CA GCGCGGGGCAGG GTGC CGCGCCCCGTCC CACG TC GAM3560 LOC153474 5' GCGCGGGGGGGGGGGGG 80740 A A GCGCGGGC GGC GTGC CGCGCCCCG CCG CGCG С GAM3560 LOC157729 5' GCCTGGGGCAGGTCAGGC 80849 GC Т GC GGGGCAGG CAG GC CG CCCCGTCC GTC CG GA Α _ GAM3560 LOC158293 3' ACAAAAAGCAGGCAGTGC 80850 CG GCG GGGCAGGCAGTGC TGT TTCGTCCGTCACG TT GAM3560 LOC163682 5' GCGCGGGGAAAGGGCCG 80851 C_ CAGT GCGCGGGG AGG GCCG CGCGCCCC TCC CGGC TT GAM3560 LOC165254 3' CGCGGGGCAGAACTCCGC 80852 CAGTG

CGCGGGCAGG CCGC

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GCGCCCCGTCT GGCG
                          TGA
GAM3560 LOC196694 5' GCGCGGAGTGGCGCCG
                                              CA AGT
                                     80853
                     GCGCGGGG GGC GCCG
                     CGCGCCTC CCG CGGC
                         A_ _
GAM3560 LOC196761 3' GCTGGAAGCAGCGGTGCTGC 80854
                                             GC
                                                  GA C
                     GC GGGGCAG C GTGC GC
                     11 1111111 1 1111 11
                     CG CTTCGTC G CACG CG
                           C A
                      AC
GAM3560 LOC196985 5' GCGCGGGGCTGGGCAGTGC 80855
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                     CGCGCCCG CCGTCACG
                         AC
GAM3560 LOC197320 5' GCGCGAGGCAGGCGGGC 80856
                                                 AGT
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                     CGCGCTCCGTCCG CG
                           CC_{-}
GAM3560 LOC201116 3' GCGGGGCAGGAAGGCGCTGC 80857
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                     CGCCCGTCC CGCG CG
                         TTC A
GAM3560 LOC201702 5' GCGCGGGGCCGGAGCGCCGC 80665
                                                 A C
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                     CGCGCCCG CC TCGCGGCG
                         G
GAM3560 LOC205888 5' GCCGGGGCAGGCTCGC
                                                AG
                                     80858 G
                     GC CGGGGCAGGC TGC
                     CG GCCCCGTCCG GCG
                           \mathsf{A}_{-}
GAM3560 LOC219333 5' GCGCAGGGCGCAGCCG
                                              AG GT
                                     80859
                     GCGCGGGGC GCA GCCG
                     11111111 111 1111
                     CGCGTCCCG CGT CGGC
GAM3560 LOC219731 5' GCCGGGGCAGGAGGATCG 80860 G
                                                 C TGC
                     GC CGGGGCAGG AG CG
                     CG GCCCCGTCC TC GC
                          _ CTA
GAM3560 LOC221184 5' GCGCGGGACAGGCTCAGGGC 80861
                                                   __ T
                     GCGCGGGCAGGC AG GC
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CGCGCCCTGTCCG TC CG
                         AG C
GAM3560 LOC222225 5' GCGCGGGGACTCGGCCGC 80862
                                            CAG AGT
                    GCGCGGGG GC GCCGC
                    CGCGCCCC TG CGGCG
                        __ AGC
GAM3560 LOC253148 3' GCGCGGAGTCGGTGCTGC 80863
                                            CA CAG C
                    GCGCGGGG GG TGC GC
                    CGCGCCTC CC ACG CG
                       AG ___ A
GAM3560 LOC253358 5' GCGCGGGCAGGCAGGTGC 80864
                                            G
                    GCGCGGG CAGGCAG TGC
                    CGCGCCC GTCCGTC ACG
GAM3560 LOC253868 5' GCTGGGGCAGGTTCAGATCG 80865 GC
                                                TGC
                    GC GGGGCAGG CAG CG
                    CG CCCCGTCC GTC GC
                     A_
                         AA TA_
GAM3560 LOC253960 5' GCGCGGGGCAGGCAACGC 80866
                    GCGCGGGCAGGCAGTGC
                    CGCGCCCGTCCGTTGCG
GAM3560 LOC254102 3' GCGCGGGGCGGTAGTGCC 80867
                                            A C
                    GCGCGGGC GG AGTGCC
                    CGCGCCCCG CC TCACGG
GAM3560 LOC255057 5' GCGCGGGGGAGGCCGGCGC 80868
                                             C A
                    GCGCGGG AGGC GTGC
                    CGCGCCCC TCCG CGCG
                       C GC
GAM3560 LOC256286 3' GCGCGGGGTGAGGTCCGGGGGC 80796
                                               C_ CAGT__
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                      GCGCGGGG AGG
                    CGCGCCCC TCC
                                  CGGCG
                       AC AGGCCCC
GAM3560 LOC257479 5' GCGCGGGGCAGAGCTGAGC 80869
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                    CGCGCCCCGTC CG CG
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GCG GGGG GGCAGTGC

C CA

GAM3560 LOC51107 5' GCGTGGGGTGGCAACGC

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CGC CCCC CCGTTGCG
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GAM3560 LOC51246 5' GCGCCGGGCGCAGTGCCGC 80871
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                    CGCG CCCG CGTCACGGCG
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GAM3560 LOC56926 5' GCGCGGGGCAGCCCG
                                            G AGTG
                                  80872
                    GCGCGGGGCAG C CCG
                    CGCGCCCCGTC G GGC
GAM3560 LOC58512 3' GCACGGGGCGGCCCG
                                  80873
                                           A AGTG
                    GCGCGGGC GGC CCG
                    CGTGCCCCG CCG GGC
GAM3560 LOC89932 5' GCACGGGGTAGGCTGC
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                                           C AG
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                    CGTGCCCC TCCG ACG
                       Α ___
GAM3560 LOC90313 3' GCGCGGGGAGGAGCCG
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                                   80875
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                    CGCGCCCC TCC CGGC
                       _ T__
GAM3560 LOC91137 5' GCGGGGGCAGGATGACGC 80876
                                              CA C
                                          С
                    GCG GGGGCAGG GTG CGC
                    CGC CCCCGTCC TAC GCG
                           Т
GAM3560 LOC91252 3' GCTTGGGACCAGTGCTGC 80877 GC AGG
                    GC GGGGC CAGTGC GC
                    CG CCCTG GTCACG CG
                     AA
                             Α
GAM3560 LOC91373 3' GCATGGGGCAGGCTGC
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                                         С
                                             AG
                    GCG GGGGCAGGC TGC
                    CGT CCCCGTCCG ACG
GAM3560 LOC91632 3' GCGCGGGGTGAGGTCCGGGGGC 80796
                                               C_ CAGT___
        CGC
                      GCGCGGGG AGG
                                     GCCGC
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GAM3560 LOC91978 3' GCGTGGGGCAGGGGCTCCCGC 80879

CGCGCCCC TCC

AC AGGCCCC

GCG GGGGCAGG GT CCGC

CGGCG

CA G_

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C_ AG
GAM3560 LOC92715 5' GCGCGGGGCGGCGAGGC 80880
                                            A _ T
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                     CGCGCCCCG CCG TC CG
                        _ C _
GAM3561 PCDHB9 3' GCAAATTAAATATTTTCACA 80883
                                          T CT
                     GCAA ATTA AATATTTTCACA
                     CGTT TAAT TTATAAAAGTGT
GAM3561 RB1CC1 3' ACATAACAATATTTTCACAC 80884
                                          TT
                     ATAT AC AATATTTTCACAC
                     TGTA TG TTATAAAAGTGTG
                      Т
GAM3561 RET 3' ATTACACTTATTTTCACA 80885
                                        TAA
                     ATTAC TATTTTCACA
                     TAATG ATAAAAGTGT
                       TGA
GAM3561 ZNF10 3' GCAATATTATTAATAATCAC 80886
                                           C TTT
                     GCAATATTA TAATA TCAC
                     CGTTATAAT ATTAT AGTG
                        A T
GAM3561 CAPS2 3' GCATATCCTTTAATATTTTCA 80887
                                          A AC
                     GCA TATT TAATATTTTCA
                     CGT ATAG ATTATAAAAGT
                      GAA
GAM3561 FLJ11896 3' GCAATATAACTAACACAATACA 80888
                                           T TTTC
                     GCAATAT ACTAATAT ACA
                     CGTTATA TGATTGTG TGT
                           TTA_
                       Т
GAM3561 FLJ23033 3' GCATATGTGCATATATTTTCAC 80889
                                           ATATTACTA
         AC
                      GCA
                            ATATTTTCACAC
                     Ш
                         CGT
                           TATAAAAGTGTG
                      ATACACGTA
GAM3561 KIAA0010 3' GCAATATTACTAAAGTAGCCAC 80890
                                                TATTT
         Α
                     GCAATATTACTAA TCACA
                     CGTTATAATGATT GGTGT
                          TCATC
GAM3561 KIAA1559 3' GCTGTATTACTAGTGACCTCAC 80891
                                           AA
                                                 ATAT
        Α
                     GC TATTACTA TTTCACA
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CGC CCCCGTCC CG GGCG

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CG ATAATGAT GGAGTGT
                      AC
                           CACT
GAM3561 KIAA1701 3' GCATATAACTCCATATTTTCAC 80892 A T A
         AC
                      GCA TAT ACT ATATTTTCACAC
                     CGT ATA TGA TATAAAAGTGTG
                      _ T GG
            3' GCAATATACTAATAAGAACAC 80893
GAM3561 RAI1
                                           Т
                                             TTTT
                     GCAATAT ACTAATA CAC
                     CGTTATA TGATTAT GTG
                           TCTT
GAM3561 LOC144519 3' GCAATATTTCTCCTATTCAC 80894
                                             A AA TT
                     GCAATATT CT TAT TCAC
                     CGTTATAA GA ATA AGTG
                        A GG
GAM3561 LOC158219 3' ACAATATTAATTTCACA 80895
                                            CTAAT
                     GCAATATTA ATTTTCACA
                     TGTTATAAT
                               TAAAAGTGT
GAM3561 LOC256940 3' GCATATTACAGCATTTCACAC 80896 A TAATAT
                     GCA TATTAC TTTCACAC
                     CGT ATAATG AAAGTGTG
                         TCGT
GAM3562 CG018 3' GAATATAATGACTTTGCT 80899
                                           ACTAA
                     GAATATAAT ACTTTGCT
                     CTTATATTA
                               TGAAACGA
                        С
GAM3562 CTCFL 3' AGAATATAATGCTCTTCCTGCT 80900
                                              A AAAC
                     AGAATATAAT CT TTTGCT
                     TCTTATATTA GA GGACGA
                         C GAA
GAM3562 KIAA0077 5' AAGAACATGATCTTCTTTGCT 80901
                                             A A AAA
                     AAGAATAT AT CT CTTTGCT
                     TTCTTGTA TA GA GAAACGA
                        C _ A__
GAM3562 POFUT1 3' AGAACACAACTGAATTTTGCT 80902
                                             AT A C
                     AGAATATA ACT AA TTTGCT
                     TCTTGTGT TGA TT AAACGA
                         _ C A
GAM3562 LOC220115 5' GAATATAAACTTTGC
                                  80903
                                          TACTAA
                     GAATATAA ACTTTGC
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CTTATATT TGAAACG

GAM3563 B4GALT6 3' TATAGATTTTAGTATAAAA 80906 Α TATAGA TTTAGTATAGAA ATATCT AAATCATATTTT GAM3563 CREB1 3' TAAGAATTTAGTACTAACT 80907 T AG A AGAATTTAGTAT AACT 1 11111111111 1111 A TCTTAAATCATG TTGA Т Α GAM3563 ETFA 3' TATAGATTTTAGTACAGAA 80908 Α TATAGA TTTAGTATAGAA ATATCT AAATCATGTCTT GAM3563 FACL2 3' TATAGAATCTAAGGCAGA 80909 TA TATAGAATTTAG TAGA ATATCTTAGATT GTCT CC GAM3563 LHCGR 3' ATAGAACAGATAGAACT TT T 80910 ATAGAAT AG ATAGAACT TATCTTG TC TATCTTGA GAM3563 NPC1 3' TAAAAATATGGTATAGAACT 80911 T TTA A AGAAT GTATAGAACT A TTTTA CATATCTTGA T TAC GAM3563 FLJ10110 3' TAGAATTTAAACAAAACT 80912 Т TAGAATTTAG ATAGAACT ATCTTAAATT TGTTTTGA GAM3563 FLJ14054 5' TATAGAATTACTTAAGAACT 80913 **TAGTAT** TATAGAATT AGAACT ATATCTTAA TCTTGA TGAAT GAM3563 KIAA1615 3' ATAGAATTTAGTTAGAA 80914 Α ATAGAATTTAGT TAGAA TATCTTAAATCA ATCTT GAM3563 LOC131368 3' TATAAAATGGAGTATAGAA 80915 TT TATAGAAT AGTATAGAA

ATATTTTA TCATATCTT CC GAM3563 LOC144308 3' TATGGAAATGTATAGAACT 80916 A TTTA TAT GAA GTATAGAACT ATA CTT CATATCTTGA C TA GAM3563 LOC150848 5' TATAAAATTTAGCTTAAGA 80917 AT_ TATAGAATTTAGT AGA ATATTTTAAATCG TCT AAT GAM3563 LOC222161 5' TGAGAATTTAGTAATAGGAGAA 80918 T T ____ CT A AGAATTTAGTA AGAACT A TCTTAAATCAT TCTTGA С TATCC GAM3563 LOC253587 3' TACAGAATTTCACAAAGAACT 80919 AG T TATAGAATTT TA AGAACT ATGTCTTAAA GT TCTTGA GT T GAM3564 DYT1 3' TACTTTTCTTTCAAAAGACT 80922 TAT G TACTTT TCTTTCAAA GACT ATGAAA AGAAAGTTT CTGA T__ GAM3564 HPGD 3' TACTTTGTCTTTAATACAT 80923 CAA TACTTTGTCTTT ATAT ATGAAACAGAAA TGTA TTA GAM3564 KCNS2 3' TTTGTTTTCACATGACT 80924 C AA TTTGT TTTCA TATGACT AAACA AAAGT GTACTGA GAM3564 MLLT2 3' CTTATGCTCAGATATGACTA 80925 CTT A CTT TGT TCA ATATGACTA GAA ACG AGT TATACTGAT T ___ C GAM3564 MTM1 3' TTTGTCTTTCAAAAACT 80926 TAT TTTGTCTTTCAAA GACT AAACAGAAAGTTT TTGA

GAM3564 SEL1L 3' TACTTTTTCTTTGCCATTGACT 80927 G CAA A TACTTT TCTTT AT TGACT

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A CGG _
                                            ΤА
GAM3564 TRHR 3' CTCTGTCTTCACATATGACTA 80928
                     CTTTGTCTT CA ATATGACTA
                     GAGACAGAA GT TATACTGAT
                        _{\rm -} G
GAM3564 BTN3A3 3' TACTTGCAAAATATGACT 80929
                                          T CTTTC
                     TACTT GT AAATATGACT
                     ATGAA CG TTTATACTGA
                       Т
GAM3564 KHDRBS1 3' TACTTTGTCTTTTTAAATAC 80930
                                              C_{-}
                     TACTTTGTCTTT AAATAT
                     ATGAAACAGAAA TTTATG
                          AA
GAM3564 KIAA0826 3' TACCTTGAAAATATGACT 80931
                                           TCTTTC
                     TACTTTG AAATATGACT
                     ATGGAAC TTTATACTGA
                        T___
GAM3564 KIAA1254 3' CACTTTGTCATGTATGACT 80932
                                            TTTCAAA
                     TACTTTGTC TATGACT
                     GTGAAACAG
                                 ATACTGA
                        TAC
GAM3564 PRO1635 3' TTTGTCTTTGGCAATATGA 80933
                                             CA
                     TTTGTCTTT AATATGA
                     AAACAGAAA TTATACT
                        CCG
GAM3564 SCDGF-B 3' TACATTGTCTTTTGTAGGACTA 80934
                                            T CAAA T
                     TAC TTGTCTTT TA GACTA
                     ATG AACAGAAA AT CTGAT
                          AC__ C
                      Т
GAM3564 SCDGF-B 3' TACATTGTCTTTTGTAGGACTA 80934
                                           T CAAA T
                     TAC TTGTCTTT TA GACTA
                     ATG AACAGAAA AT CTGAT
                      Т
                          AC__ C
GAM3564 LOC169611 3' ACTTTGTTCTAAATATGACT 80935
                                             _ TTC
                     ACTITGT CT AAATATGACT
                     TGAAACA GA TTTATACTGA
                        Α
GAM3564 LOC202460 5' TTTGTCTTTCAAGACT
                                  80936
                                             ATAT
                     TTTGTCTTTCAA GACT
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ATGAAA AGAAA TA ACTGA

AAACAGAAAGTT CTGA

GAM3564 LOC91133 3' TACTTGTCTTTCAACACTG 80937 T ATA TACTT GTCTTTCAA TG ATGAA CAGAAAGTT AC GTG GAM3565 FLJ11896 3' TATTTTTCTATTTACAATTT 80940 GC TATTTTTTAT TTACAATTT ATAAAAAGATA AATGTTAAA GAM3565 KIAA0280 3' TATTTCTTCATTTGCAATTTCT 80941 **GCTTA** TATTTTTTAT CAATTTCT ATAAAGAAGTA GTTAAAGA AAC__ GAM3566 DDX1 3' TAGCATTAATAGCTTACGTTAC 80944 A___ AAA TAT TAGCATTAATA ATGT ACTAT ATCGTAATTAT TGCA TGATA CGAA A__ GAM3566 PSEN2 3' GCACTAGAGTGTAAAACTAT 80945 **ATAAA** GCATTA TGTAAAACTAT CGTGAT ACATTTTGATA CTC GAM3566 PSEN2 3' GCACTAGAGTGTAAAACTAT 80945 **ATAAA** GCATTA TGTAAAACTAT CGTGAT ACATTTTGATA CTC GAM3566 KIAA0820 3' TAGCATGTGACAATAAAACTAT 80946 TAATAAAT TAGCAT GTAAAACTAT ATCGTA TATTTTGATA CACTGT GAM3567 LOC222224 3' CTGTTCCAATCTGCTGTGATC 80949 **ACTAC** CTGTTC GGTCTGCT GATC GACAAG TTAGACGA CTAG G CA GAM3568 ANKRA2 5' AGGGTCATTTCAGTTGACG 80952 A_ T_ AG TCATTTCAGTT CG TC AGTAAAGTCAA GC CC CT TCA C_ GAM3568 FCN2 3' TAAGATCATTGTCCTGGTCTTT 80953 TAAGATCATT GTTT GTCTTT

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AC
GAM3568 DKFZP434K028 3' GACATTTCAGCCACCTCTTT 80954 T
                                                   TCG
                     GA CATTTCAGTT TCTTT
                     CT GTAAAGTCGG AGAAA
                           TGG
GAM3568 DKFZP564O0423 3' GATCACTTCTGGTTTTGT
                                        80955
                                                 A C
                     GATCATTTC GTTT GT
                     CTAGTGAAG CAAA CA
                         AC A
GAM3568 PRO2730 3' TAAGATCATTTGGTTTC 80956
                                             CA
                     TAAGATCATTT GTTTC
                     ATTCTAGTAAA CAAAG
                          С
GAM3568 SS-56 3' TAAGGCCATTTCAGTTTC 80957
                                         AΤ
                     TAAG CATTTCAGTTTC
                     ATTC GTAAAGTCAAAG
                       CG
GAM3568 LOC149721 5' AAATCATTTCAGGCCTT
                                              TTTC
                                    80958
                     AGATCATTTCAG GTCTT
                     TTTAGTAAAGTC CGGAA
GAM3569 ATP5A1 3' TTCATGTGATTTCTGTACA 80961
                                            С
                     TTCATGTGA TTTGTATA
                     AAGTACACT AGACATGT
                         AA
GAM3569 PCDHB16 5' TTCATGTGACTTTCGTGTAT 80962
                     TTCATGTGACTT TGTAT
                     AAGTACACTGAA ACATA
                          AGC
GAM3569 FLJ10900 3' TATGAAAGTATAATTTAC 80963
                                          CTTT
                     TGTGA GTATAATTTAC
                     ATACT CATATTAAATG
                       TT
GAM3569 FLJ10900 3' TATGAAAGTATAATTTAC 80963
                                          CTTT
                     TGTGA GTATAATTTAC
                     ATACT CATATTAAATG
                       \mathsf{TT}_{\_\_}
GAM3569 INA
            3' TTCGTGTGACTTTTAATTTA 80964
                                        Α
                                             GTA
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TTC TGTGACTTT TAATTTA

ATTCTAGTAA CAGG CAGAAA

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AAG ACACTGAAA ATTAAAT
                      C
GAM3569 KIAA0608 3' TTCAGTGACTTAAATAATTTAC 80965 T TGT
                     TTCA GTGACTT ATAATTTAC
                     AAGT CACTGAA TATTAAATG
                          TT
GAM3569 MBLL39 3' TTCAGTGATTCCCATAATTTAC 80966
                                            T C G
                     TTCA GTGA TTT TATAATTTAC
                     AAGT CACT AAG GTATTAAATG
                       _ _ G
GAM3569 MIL1
            3' TTCATGTGATTTTTCTCTGT 80967
                     TTCATGTGA CTTTGT
                     AAGTACACT GAGACA
                        AAAAA
GAM3569 LOC148114 3' TTCATGTGGACTTAAATGT 80968
                     TTCATGTG ACTT TGT
                     AAGTACAC TGAA ACA
                        C TTT
GAM3570 HLA-A 3' AAGAGGGTCATGGTGGACATGG 80971
                                                 ATTTAAT
                     AAGA GTCATGGT TGG
                     TTCT CAGTACCA
                                    ACC
                      CC
                            CCTGT
GAM3570 C6orf5 3' TAAAGGTCATACAGCTAATTGG 80972
                                          A GTAT
                     TAAAG GTCATG TTAATTGG
                     ATTTC CAGTAT GATTAACC
                          \mathsf{GTC}_{-}
GAM3570 DKFZP547E2110 3' TAAAGGTCATGGTATTT 80973
                     TAAAG GTCATGGTATTT
                     ATTTC CAGTACCATAAA
GAM3570 FLJ13102 3' AAGAGAGTAGCATTTGGTTGG 80974
                                            TCA
                                                   AA
                     AAGAG TGGTATTT TTGG
                     TTCTC ATCGTAAA AACC
                       TC_
                             CC
GAM3570 JWA
            3' TAAAGATCATGGCTGTAGGTTG 80975
                                            G
                                                ATTTAA
         G
                      TAAAGA TCATGGT TTGG
                     ATTTCT AGTACCG AACC
                           ACATCC
GAM3570 TP53INP1 3' TAAACAGTTGAAATTTAATTGG 80976
                                            G CA T
                     TAAA AGT TGG ATTTAATTGG
```

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G __ T
GAM3570 TP53INP1 3' TAAACAGTTGAAATTTAATTGG 80976
                                           G CA T
                     TAAA AGT TGG ATTTAATTGG
                     ATTT TCA ACT TAAATTAACC
                      G __ T
GAM3570 LOC221833 3' GAGTTATATTTAATTGG 80977
                                         CATG
                     GAGT GTATTTAATTGG
                     CTCA TATAAATTAACC
GAM3570 LOC257490 3' AAGAGGGTCATGGTGGACATGG 80971
                                                  ATTTAAT
                     AAGA GTCATGGT TGG
                     TTCT CAGTACCA
                                    ACC
                      CC
                           CCTGT_
GAM3571 SOX4 3' TCTGCCATCGGCCAAA 80980 A ATGCT T
                     TCT CCATC G GTCAAA
                     AGA GGTAG C CGGTTT
                      С
GAM3571 TAF4
            3' TCTATGTCATGTGCCAAA 80981
                                        CCA TGC
                     TCTA TCA TGTGTCAAA
                     AGAT AGT ACACGGTTT
                      AC_ _
GAM3571 ATF3
            3' CCTGCCATCATGCTGCCCA 80982
                                               G
                                         Α
                     TCT CCATCATGCTGT TCA
                     GGA GGTAGTACGACG GGT
                      С
GAM3571 DKFZP434K0427 3' TCTATGTCTATGTCAAAT 80983
                     TC ATG CTGTGTCAAAT
                     AG TAC GATACAGTTTA
                     A A
GAM3571 FLJ23499 3' TACCAAGACTCTGTGTCAA 80984
                                          TC G
                     TACCA AT CTGTGTCAA
                     ATGGT TG GACACAGTT
                       TC A
GAM3571 LOC142941 3' TCTACCATTGCTGGGCACA 80985
                                             CA T_
                     TCTACCAT TGCTG GT CA
                     AGATGGTA ACGAC CG GT
                         _ C T
GAM3571 LOC200299 3' ATCATCTTTGTCAAATT 80986
                                          GG
                     ATCAT CT TGTCAAATT
```

ATTT TCA ACT TAAATTAACC

```
TAGTA GA ACAGTTTAA
                       _ A
GAM3571 LOC200300 3' ATCATCTTTGTCAAATT 80986
                                          GG
                     ATCAT CT TGTCAAATT
                     TAGTA GA ACAGTTTAA
GAM3571 LOC200304 3' ATCATCTTTGTCAAATT 80986
                                          GG
                     ATCAT CT TGTCAAATT
                     TAGTA GA ACAGTTTAA
                       Α
GAM3571 LOC200305 3' ATCATCTTTGTCAAATT 80986
                                          GG
                     ATCAT CT TGTCAAATT
                     TAGTA GA ACAGTTTAA
                       Α
GAM3571 LOC254182 3' TCTGCAGTCATGCTGACCCA 80987 AC
                                                   TG
                     TCT CATCATGCTG TCA
                     AGA GT AGTACGAC GGT
                      C C
                           TG
GAM3572 RFX5
            3' TTGAATTAGGTTTTCTGTGAT 80990
                                          C TTTG C
                     TTGAA TAG TTCT GTGAT
                     AACTT ATC AAGA CACTA
                       A CAA_ _
GAM3572 FLJ13224 3' AGCGCTGTTTTCGTGATC 80991
                                          _ C
                     AGT TTGTT TCGTGATC
                     TCG GACAA AGCACTAG
                      C A
                                          T TACATT
GAM3573 SCA1
            3' TTTAATACAGTTGAACCA 80994
                     TTTAATAC AGTTG CCA
                     AAATTATG TCAAC
                                  GGT
                        _ TT_
GAM3573 ZNF146 3' CTTAATATTAGTTGTAGATGAC 80995
                                            С
                                                 CATT_
        CAT
                      TTTAATA TAGTTGTA CCAT
                     GAATTAT ATCAACAT GGTA
                            CTACT
GAM3573 ARPC5 3' AATACTAGTTGTATACCTCAT 80996
                                              C TC
                     AATACTAGTTGTA AT CAT
                     TTATGATCAACAT TG GTA
                          A GA
GAM3573 KIAA1164 3' TTTAATACAATTGAACATTTCA 80997
                                             TTC
```

TTTAATAC AGTTG ACATT CAT

Т

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_ T A
GAM3573 LOC157867 5' TTTAACACTGAATAATATTCCA 80998
                                              T CA
        Т
                     TTTAATACT AGT GTA TTCCAT
                     AAATTGTGA TTA TAT AAGGTA
                        СТ
GAM3574 LOC154007 3' CAGTATATGATTTCTTGG 81001
                                            A CG
                     TAGTATAT ATTTC GG
                     GTCATATA TAAAG CC
                        C AA
GAM3574 LOC200609 5' TAGTATATGCATATGATGGATT 81002
                                              A TTCCG
        ATT
                      TAGTATAT AT GGATTATT
                     ATCATATA TA CCTAATAA
                        CG TACTA
GAM3575 EDAR 3' TACGTTCCTTCTGTCTTCTA 81005
                                          G ____
                     TGCGT CC GTCTTCTA
                     ATGCA GG CAGAAGAT
                       A AAGA
GAM3575 MXI1
            3' TGCGTGCACAACTCTTCT 81006
                     TGCGTGC CG TCTTCT
                     ACGCACG GT AGAAGA
                       T TG
GAM3575 MXI1
            3' TGCGTGCACAACTCTTCT 81006
                     TGCGTGC CG TCTTCT
                     ACGCACG GT AGAAGA
                       T TG
GAM3575 FLJ12747 3' ATACATAAGTTGTCTTCTA 81007
                                           CC
                     GTGCGTG GTCTTCTA
                     TATGTAT CAGAAGAT
                       TCAA
GAM3575 KIAA0365 3' TAACATCACAAATGTCTTCTA 81008
                                            TGCC
                     TAACGT GCG GTCTTCTA
                     ATTGTA TGT CAGAAGAT
                       G TTA
GAM3575 KIAA1416 3' GTGCTATTTCGTCTTCTA 81009
                                          _ GC
                     GTGC GT CGTCTTCTA
                     CACG TA GCAGAAGAT
                      A AA
                                          _ CGT C
GAM3575 KIAA1710 3' TAACTGTGGGCATCTTCT 81010
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TAAC GTG GC GTCTTCT

AAATTATG TTAAC TGTAA GTA

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A C__ _
GAM3575 PRO0149 5' TAACGTGCTCTTCT 81011 G CG
                    TAACGTGC TGC TCTTCT
                    ATTGCACG ACG AGAAGA
GAM3575 RP4-622L5 5' CAACGCCGCTGTCTTCTA 81012
                                          GCG C
                    TAACGT TGC GTCTTCTA
                    GTTGCG GCG CAGAAGAT
GAM3575 LOC123036 3' TAATGGTAAAGTCTTCTA 81013 C C CC
                    A GTG GTG GTCTTCTA
                    A TAC CAT CAGAAGAT
                    T TT
GAM3575 LOC199990 3' GTGGCAGAGCCGTCTTCT 81014 _ T_
                    GTG CG GCCGTCTTCT
                    CAC GT CGGCAGAAGA
                     C CT
GAM3575 LOC201617 5' CAACTGAGACGTTGTCTTCTA 81015 GT GCC
                    TAAC GCGT GTCTTCTA
                    GTTG TGCA CAGAAGAT
                      ACTC A
GAM3575 LOC221540 3' ACGTGCAGCTCTTCT 81016
                                        T CG
                    ACGTGCG GC TCTTCT
                    TGCACGT CG AGAAGA
                                        T CG
GAM3575 LOC257545 3' ACGTGCAGCTCTTCT 81016
                    ACGTGCG GC TCTTCT
                    TGCACGT CG AGAAGA
GAM3575 LOC257598 3' ACGTGCAGCTCTTCT 81016
                                        T CG
                    ACGTGCG GC TCTTCT
                    TGCACGT CG AGAAGA
GAM3575 LOC90906 3' CAATACCTTTGCCGTCTTCT 81017 C G_
                    A GTGC TGCCGTCTTCT
                    G TATG ACGGCAGAAGA
                    T GAA
GAM3576 CDKN1B 5' GACCAGGCAAGCGGAGAGGGT 81020 A TCAA TCA
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GACCAG CAA AGA GGT

ATTG CAC CG TAGAAGA

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C CGCC C_
                                         CAATCAA
GAM3576 CREBBP 3' AGACCAGATATTTAAATCAACT 81021
        GGT
                     AGACCAGA AGATCA GGT
                   TCTGGTCT TTTAGT CCA
                      ATAAA TGA
GAM3576 EIF2C1 3' CAGAGAACAAATCAGGT 81022
                                      C CAA
                   CAGA AAT AGATCAGGT
                   GTCT TTG TTTAGTCCA
                     С
GAM3576 GAS7 3' GATCAGATAATCAATCAGG 81023 C C AAG
                   GA CAGA AATCA ATCAGG
                   CT GTCT TTAGT TAGTCC
                    A A
GAM3576 MOX2 3' AGACCAGGGAATCACTTTCAGG 81024
                                         AC AAGA
                   AGACCAG AATCA TCAGG
                   TCTGGTC TTAGT AGTCC
                      CC GAA
GAM3576 NEK6 3' AGCTCAGACAATTGGAAGG 81025 AC
                                           CAAA TC
                   AG CAGACAAT GA AGG
                   TC GTCTGTTA CT TCC
                         AC__ _
                    GA
GAM3576 NOL3 3' AGCCAGACAATTAAAACAG 81026 A
                                          CA T
                   AG CCAGACAAT AAGA CAG
                   TC GGTCTGTTA TTTT GTC
GAM3576 OLIG2 3' AGCCAGACAGCGCTCGATCAGG 81027 A ATCAAA
        Т
                    AG CCAGACA GATCAGGT
                   TC GGTCTGT
                              CTAGTCCA
                       CGCGAG
GAM3576 TNFRSF4 3' AGATCAGGAAATCAAGGACC 81028
                                         C AC A
                   AGA CAG AATCAA GATC
                    TCT GTC TTAGTT CTGG
                     A CT
                         С
GAM3576 APOARGC 5' AAACCAGATAGTCAAATTAAGT 81029
                                           CAA GATC
                   AGACCAGA TCAAA AGGT
                   TTTGGTCT AGTTT TTCA
                      ATC AA_
GAM3576 CAMKK1 3' AGACCAGATGCTCAAGGAACA 81030
                                           CAA A T
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AGACCAGA TCAA GA CA

CTGGTC GTT TCT CCA

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TCTGGTCT AGTT CT GT
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ACG C T GAM3576 FLJ10103 3' AGACCAGATAATCTGGCTCTGG 81031 C AAAGA A Т AGACCAGA AATC TC GGT TCTGGTCT TTAG AG CCA A ACCG A GAM3576 FLJ31168 3' AGACCAGATGAATCAAGGAAAA 81032 C_ A TC AGACCAGA AATCAA GA AG G TCTGGTCT TTAGTT CT TC AC C TT GAM3576 FLJ32940 5' AGACGGGATGGTCAATCAGGT 81033 CA CAA AAG AGAC GA TCA ATCAGGT TCTG CT AGT TAGTCCA CC ACC GAM3576 GABARAP 3' AGACTGACAATCAAGA 81034 CA AGAC GACAATCAA GA TCTG CTGTTAGTT CT **A**_ GAM3576 KIAA1938 3' GACCAGCCGAGAGCAGATCAGG 81035 ACAATCAA GACCAG AGATCAGGT CTGGTC TCTAGTCCA **GGCTCTCG** GAM3576 MGC10940 3' AGATTAGAAGTCAAAGATCAAG 81036 CC CAA GT AGA AGA TCAAAGATCA GGT TCT TCT AGTTTCTAGT CCA AA TC_ Т GAM3576 SERPINB7 3' GATCAGGACAATCAACCAGGT 81037 C AAG GA CAG ACAATCA ATCAGGT CT GTC TGTTAGT TGGTCCA A C GAM3576 SLC26A10 5' AGACCAGGACAATTAGGTTTGG 81038 CAA ATCA AGACCAG ACAAT AG GGT TCTGGTC TGTTA TC CCA C A CAAA GAM3576 SS-56 3' CAGGACAATCATATGAGGT 81039 _ AAG C CAG ACAATCA AT AGGT GTC TGTTAGT TA TCCA A__ C С GAM3576 TA-NFKBH 3' GACTGGAAAATCAGTCCAGG 81040 CA C AA A GAC GA AATCA G TCAGG

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CTG CT TTAGT C GGTCC
                     AC T __ A
                                             AC AGAT
GAM3576 LOC149421 5' AGACCAGGTAATCAATGCAGAT 81041
                    AGACCAG AATCAA CAGGT
                    TCTGGTC TTAGTT GTCTA
                       CA
                           AC
GAM3576 LOC149478 3' GACTGACAATCAAAAACAGGT 81042
                                           CA
                                                  Τ
                    GAC GACAATCAAAGA CAGGT
                    CTG CTGTTAGTTTTT GTCCA
GAM3576 LOC158972 3' AGACCAGATATTCAGAGACC 81043
                                             CAA A
                    AGACCAGA TCA AGATC
                    TCTGGTCT AGT TCTGG
                       ATA C
GAM3576 LOC170132 5' CCAGAACTTAAGATCAGGT 81044
                                           CA CA
                    CCAGA AT AAGATCAGGT
                    GGTCT TG TTCTAGTCCA
                      __ AA
GAM3576 LOC200515 5' AGACCAGACAGCAGGACATGG 81045
                                             ATCAA AT
                    AGACCAGACA AG CA GG
                    TCTGGTCTGT TC GT CC
                        CG___ CT A
GAM3576 LOC254571 3' ACCAGACAGTCAAGCAGGT 81046
                                           A AGAT
                    ACCAGACA TCAA CAGGT
                    TGGTCTGT AGTT GTCCA
                       CC
GAM3576 LOC254600 5' AGACCAGGCTGGTCCTACCCAG 81047
                                              ACAA AAAGA
        GT
                     AGACCAG TC TCAGGT
                    TCTGGTC AG GGTCCA
                       CGACC GATG
GAM3576 LOC256515 5' GACTGACGGACCAATCAGGT 81048
                                           CA A_ AAG
                    GAC GAC ATCA ATCAGGT
                    CTG CTG TGGT TAGTCCA
                     A_ CC
GAM3577 CSF1R 3' TGTGGAGTGAAGGCGGCGT 81051
                                            A GA
                    TGTGGAGTGGA GCG GCGT
```

ACACCTCACTT CGC CGCA

TGTGGAGTGGA G GGAG

A C

С

5' TGTGGAGTGGAG 81052

GAM3577 HSF4

ACACCTCACCT C CCTC

_ A GAM3577 CDCA4 3' TGTGGGGTGAGGCGGGGC 81053 A AA A TGTGG GTGG GCGG GC ACACC CACT CGCC CG CGAM3577 KIAA0652 3' TGAGGGGTGGGAGCAGCTGAT 81054 T A A GG G TG GG GTGG AGC AGC TGAT AC CC CACC TCG TCG ACTA T C C __ _ GAM3577 PRAX-1 3' TGTGCAGTGGAAGCGAGGT 81055 GC TGTG AGTGGAAGCG AG GT ACAC TCACCTTCGC TC CA GAM3577 LOC151632 5' TGTGGAGTGGGGGCTGTG 81056 AAGC A TGTGGAGTGG GG GC GTG ACACCTCACC CC CG CAC GAM3577 LOC152271 3' TGTGGAGTGGGGGCTGTG 81056 AAGC A TGTGGAGTGG GG GC GTG ACACCTCACC CC CG CAC ____ A GAM3577 LOC200904 5' TGTGGAGTGGGGGCTGTG 81056 AAGC A TGTGGAGTGG GG GC GTG ACACCTCACC CC CG CAC __ _ A AAGC A _ GAM3577 LOC203083 5' TGTGGAGTGGGGGCTGTG 81056 TGTGGAGTGG GG GC GTG ACACCTCACC CC CG CAC GAM3577 LOC219919 5' TGTGGAGTGGGGGCTGTG 81056 AAGC A _ TGTGGAGTGG GG GC GTG ACACCTCACC CC CG CAC ____ A GAM3577 LOC254176 5' TGTGGAGTGGGGGCTGTG 81056 AAGC A _ TGTGGAGTGG GG GC GTG ACACCTCACC CC CG CAC __ _ A GAM3577 LOC256594 5' TGTGGAGTGGGGGCTGTG 81056 AAGC A _ TGTGGAGTGG GG GC GTG

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ACACCTCACC CC CG CAC
                           __ _ A
GAM3577 LOC55885 3' TGGAGTGGAGGTGCACG
                                              AGC A
                                     81057
                     TGGAGTGGA GG GCGTG
                     ACCTCACCT CC CGTGC
                          ___ A
GAM3578 RELN 3' TTATTTAAGCATGGGCTTT 81060
                                              TGTGA
                     TTATTTGAGTGTG GCTTT
                     AATAAATTCGTAC
                                    CGAAA
                           С
GAM3578 BICD2 3' TTTGGGTCTGTGTAAAGGTTC 81061
                                            A G
                                                  CT
                     TTTG GT TGTGTGAG TTC
                     AAAC CA ACACATTT AAG
                       CG
                             CC
                                                GGC
GAM3578 DONSON 3' TCATTTGAGTTATCTGAGTTTT 81062
                     TTATTTGAGT TGT TGAG TTT
                     AGTAAACTCA ATA ACTC AAA
                         _ G A
GAM3578 FLJ20093 3' TTTGAGTGTGAGAGTTTT 81063
                                             TGT C
                     TTTGAGTGTG GAG TTT
                     AAACTCACAC CTC AAA
                         T__ A
GAM3578 GPR105 3' TTGTCTGGGTGTCAGCTTT 81064
                                           AG T G
                     TTG TG GTGT AGCTTT
                     AAC AC CACA TCGAAA
                      AG C G
GAM3578 LOC144997 3' TATTTTGTATGTGTGGGCTTT 81065
                                              GA
                     TATTT GTGTGTGTG GCTTT
                     ATAAA CATACACAC CGAAA
                       \mathsf{A}_{-}
                             C
GAM3578 LOC147929 3' TTCTTTGGGTGTGAGTTTT 81066
                                            GAG T
                                                    C
                     TTT TG GTGTGAG TTT
                      AAG AC CACACTC AAA
                       AA_C
                              Α
GAM3578 LOC150333 5' TTCACCTGTGTGTGGGCTTTC 81067
                                              AG
                                                   Α
                     TTTG TGTGTGTG GCTTTC
                     AAGT ACACACAC CGAAAG
                       GG
                            С
GAM3578 LOC221712 5' ATTTGATCTGTGAGCTTT 81068
                                             GTG G
                     ATTTGA T TGTGAGCTTT
```

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TAAACT A ACACTCGAAA
                        G
GAM3579 GYPA 3' TTAATTGCCATTGTAACAGTGT 81071 CC T T
                    TTAATTGCTA GT ACA TGT
                    AATTAACGGT CA TGT ACA
                        AA T C
                                               T CGTT _
GAM3579 DKFZP434N093 3' TTAATTGCACACAGTTGTA 81072
                    TTAATTGC AC ACA TTGTA
                     AATTAACG TG TGT AACAT
GAM3579 FLJ13231 3' ATTGCTACACATTGTA
                                81073
                                         CGTT
                    ATTGCTAC ACATTGTA
                     TAACGATG TGTAACAT
                                             A A _
GAM3579 U2AF65 3' TTAATTGCTGCCATTCCAGTTG 81074
        C
                     TTAATTGCT CCGTT CA TTGT
                     AATTAACGA GGTAA GT AACG
                        CGC
GAM3579 LOC147072 3' TTAATAGCTTTGATACATTGT 81075
                                            T ACCGT
                    TTAAT GCT TACATTGT
                     AATTA CGA ATGTAACA
                      T AACT
GAM3580 ADORA2A 3' CACCTGGTGCAAGGCCTCAC 81078
                                               TTTTA
                     CACCTGGTGCGA TCAC
                     GTGGACCACGTT AGTG
                         CCGG
GAM3580 ANKRD3 3' CCTGGGGCTTCATCAC
                                         T GAT
                                  81079
                     CCTGG GC TTTATCAC
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GAM3580 ANKRD3 3' CCTGGGGCTTCATCAC 81079 T GAT
CCTGG GC TTTATCAC
||||| || |||||||
GGACC CG AAGTAGTG
C ___

GAM3580 CCRL1 3' CTGTGTCATTTTATCAC 81080 G CG CTG TG ATTTTATCAC

GAC AC TAAAATAGTG

GTGGACCA CTGGGGTAG

_ AG

GAM3580 CEBPA 3' CACCTGGTGACCCCATC 81081 GC
CACCTGGT GATTTTATC
|||||||||||||||||

GAM3580 FMR2 3' CACCTGCTGTTTCTATCA 81082 G CGA
CACCTG TG TTTTATCA
|||||||||

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GTGGAC AC AAGATAGT
                      GA
GAM3580 MTMR8 3' CACCTAGTGAATATTAC 81083 C T
                    CACCTGGTG GAT TTAT
                    GTGGATCAC TTA AATG
GAM3580 NDRG2 3' ACACTGGATGTTTTTATCAC 81084 _ _ CGA
                    AC CTGG TG TTTTATCAC
                    TG GACC AC AAAATAGTG
                     TTA
GAM3580 NDUFA5 3' CACTTGTGCTATTTTATCAC 81085
                                        CTG G
                    CAC GTGC ATTTTATCAC
                    GTG CACG TAAAATAGTG
                     AA A
GAM3580 PCDHA9 3' CTGATCATTTTATCAC 81086
                                       GG
                    CTGGT C ATTTTATCAC
                    GACTA G TAAAATAGTG
GAM3580 PSCD4 3' CCGGGCTGCCCTTTATCAC 81087 T GA
                    CC GG TGC TTTTATCAC
                    GG CC ACG GAAATAGTG
                     CGG
GAM3580 SLC9A3R1 3' CCTGGACCCATTTATCAC 81088 T GAT
                    CCTGG GC TTTATCAC
                    GGACC TG AAATAGTG
                      _ GGT
GAM3580 STCH 3' ACCTCAATTTTATCA
                              81089
                                     GGTG
                    ACCT CGATTTTATCA
                    TGGA GTTAAAATAGT
GAM3580 TRHDE 3' TGGTAACTGGATTTTATCA 81090
                                         C___
                    TGGTG GATTTTATCA
                    ACCAT CTAAAATAGT
                      TGAC
GAM3580 VENTX2 3' CACTTGTACTTTTATCAC 81091 CTG GA
                    CAC GTGC TTTTATCAC
                    GTG CATG AAAATAGTG
                     AA_
GAM3580 C20orf154 3' CATCTGGAGACTTTATCAC 81092 C TGC
                    CA CTGG GATTTTATCAC
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GT GACC CTGAAATAGTG
                      A T__
GAM3580 DEGS 3' CCCGGCTAATTTTATCA 81093
                                          GC
                     CCTGGT GATTTTATCA
                     GGGCCG TTAAAATAGT
                        Α_
GAM3580 DKFZp434F1819 5' CACTTTGTGCTTCATCTTATCA 81094 CTG G__
         С
                      CAC GTGC ATTTTATCAC
                     GTG CACG TAGAATAGTG
                      AAA AAG
GAM3580 DKFZP547L112 3' ACCTGGACATTTATCAC 81095
                                             T AT
                     ACCTGG GCG TTTATCAC
                     TGGACC TGT AAATAGTG
GAM3580 DKFZP566D1346 3' TAATACAAGATTTTATCAC 81096
                     TGGTGC GATTTTATCAC
                     ATTATG CTAAAATAGTG
                        TT
GAM3580 EML4 3' ACCTGAACTTTATCA
                                 81097
                                        GTGC
                     ACCTG GATTTTATCA
                     TGGAC TTGAAATAGT
GAM3580 EPB41L4 3' CCTGATGCGGATTGGGTCAC 81098
                                               _ TTA
                     CCTGGTGCG ATT TCAC
                     GGACTACGC TAA AGTG
                         C CCC
                                          GGT GA
GAM3580 FLJ00001 3' CACCTGCTCCTTATCA
                                  81099
                     CACCT GC TTTTATCA
                     GTGGA CG GGAATAGT
                       ___ A_
GAM3580 FLJ20051 3' CCCTATGCAATTTTGTCA 81100
                                          G
                                               Α
                     CCT GTGCGATTTT TCA
                     111 11111111111111111
                     GGG TACGTTAAAA AGT
                      Α
                           С
                                             _ C TTA
GAM3580 FLJ22477 3' CACCTGTGTGGACCACTCAC 81101
                     CACCTG GTG GATT TCAC
                     GTGGAC CAC CTGG AGTG
                        A _ TG_
GAM3580 KIAA0155 3' CTGAAACATTTTTATCAC 81102
                                          T A
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CTGG GCG TTTTATCAC

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T A
                                         G TT
GAM3580 KIAA0420 3' CACCTGGTCAAGGTTAC 81103
                    CACCTGGT CGA TTAT
                    GTGGACCA GTT AATG
                       ^{-} CC
GAM3580 KIAA1223 3' CACATGCACATTTTTTATCAC 81104
                                          CTG TG A
                    CAC G CG TTTTATCAC
                    GTG C GT AAAATAGTG
                     TA GT AA
GAM3580 KIAA1958 3' CTGGTGCGTGAATCTTTTATCA 81105
                    CTGGTGCG
                              TTTTATCA
                    GACCACGC AAAATAGT
                       ACTTAG
                                            G
GAM3580 KIAA1970 3' CACCTGGTTCTGTGGCATTTT 81106
                    CACCTGGT
                              GC ATTTT
                    GTGGACCA
                             CG TAAAA
                       AGACAC _
GAM3580 LAT1-3TM 3' CACCTGGTCTGCAGCCGTCAC 81107
                                             ATT TA
                    CACCTGGT GCG T TCAC
                    GTGGACCA CGT G AGTG
                       GA C GC
GAM3580 LUC7L 3' CCTGTGCAGCCCATCAC 81108
                                        G AT
                    CCTG TGCG TTTATCAC
                    GGAC ACGT GGGTAGTG
                      _ C_
GAM3580 RAB14 3' TGGTGACATACTTATCAC 81109
                                        ΑT
                    TGGTG CG TTTATCAC
                    ACCAC GT GAATAGTG
                      T AT
GAM3580 RNF2 3' CTAAGCAGTTTTATCAC 81110
                                       T A
                    CTGG GCG TTTTATCAC
                    GATT CGT AAAATAGTG
                      _ C
GAM3580 WSB1
           3' ACCTCACCATTTTATCA 81111
                                       GG G
                    ACCT TGC ATTTTATCA
                    TGGA GTG TAAAATAGT
                      G
GAM3580 LOC115129 3' CACCTGGCCTATTTTATCA 81112
                                            GCG
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CACCTGGT ATTTTATCA

GACT TGT AAAATAGTG

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GTGGACCG TAAAATAGT
                        GΑ
GAM3580 LOC124045 3' CACCTGCTGTCCATCA 81113
                                           G CGAT
                     CACCTG TG TTTATCA
                     GTGGAC AC AGGTAGT
                       G
GAM3580 LOC145719 3' CACCTGGTGGATTTCAT
                                    81114
                                             С
                     CACCTGGTG GATTTTAT
                     GTGGACCAC CTAAAGTA
GAM3580 LOC145720 3' CACCTGGTGGATTTCAT 81114
                                             С
                     CACCTGGTG GATTTTAT
                     GTGGACCAC CTAAAGTA
GAM3580 LOC146337 3' CCTGGTGCGACCCACTCA 81115
                                               TΑ
                     CCTGGTGCGATTT TCA
                     GGACCACGCTGGG AGT
                          TG
GAM3580 LOC147947 5' CTTGTACATTTTATCAC 81116 G G
                     CT GTGC ATTTTATCAC
                     GA CATG TAAAATAGTG
GAM3580 LOC158337 5' CACCTAGTCATTTTGTCA 81117
                                             GG A
                     CACCTGGT C ATTTT TCA
                     GTGGATCA G TAAAA AGT
GAM3580 LOC197114 3' CACCTGGTGGATTTCAT
                                             С
                                    81114
                     CACCTGGTG GATTTTAT
                     GTGGACCAC CTAAAGTA
GAM3580 LOC197117 3' CACCTGGTGGATTTTAT
                                             С
                                    81118
                     CACCTGGTG GATTTTAT
                     GTGGACCAC CTAAAATA
GAM3580 LOC197135 3' CCATCTGCACTTTTATCAC 81119
                                           TGG A
                     CC TGCG TTTTATCAC
                     GG ACGT AAAATAGTG
                      TAG G
GAM3580 LOC197423 5' CACCTGGTTTGCAGCCGTCAC 81120
                                                ATT TA
                     CACCTGGT GCG T TCAC
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AA C_GC
GAM3580 LOC202865 3' ACCTGGTGGCTTGTCAC 81121
                                             CGAT A
                     ACCTGGTG TTT TCAC
                     TGGACCAC GAA AGTG
                        C___ C
GAM3580 LOC203392 5' CACCTAGCCTTTGTCA
                                   81122
                                            GCGA A
                     CACCTGGT TTTT TCA
                     GTGGATCG GAAA AGT
                         С
GAM3580 LOC221312 3' CCTTGTAGATTTTATCA 81123
                                          G C
                     CCT GTG GATTTTATCA
                     GGA CAT CTAAAATAGT
GAM3580 LOC253414 5' CCTTGGTGGGAATTTATCAC 81124
                                            СТ
                     CCT GGTG GA TTTATCAC
                     GGA CCAC CT AAATAGTG
                      ACT
GAM3580 LOC253715 3' CCTGGTGCTCATCAC
                                            GATT
                                   81125
                     CCTGGTGC TTATCAC
                     GGACCACG AGTAGTG
GAM3580 LOC254537 5' CACTTGCTGCTTCATCAC 81126
                                          C G GAT
                     CAC TG TGC TTTATCAC
                     GTG AC ACG AAGTAGTG
                      ΑG
GAM3580 LOC255654 5' ACCTGATGCCATATCA 81127
                                            G TTT
                     ACCTGGTGC A TATCA
                     TGGACTACG T ATAGT
                         G ___
GAM3580 LOC257354 3' CACCTGGTCAAGGTTAC
                                             G TT
                                    81103
                     CACCTGGT CGA TTAT
                     11111111 111 1111
                     GTGGACCA GTT AATG
                        _ CC
GAM3580 LOC257355 3' CACCTGGTGGCTCCTTTTAT 81128
                                               _ GA_
                     CACCTGGTG C TTTTAT
                     GTGGACCAC G AAAATA
                         C AGG
GAM3580 LOC257469 5' ACCTGGTACCTCCCCGTCAC 81129
                                               GA TA
                     ACCTGGTGC TTT TCAC
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111111111 111 1111

GTGGACCA CGT G AGTG

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GA GC
GAM3580 LOC51172 3' CACCTGGTGGCTCCTTTTAT 81128
                                             GA
                    CACCTGGTG C TTTTAT
                    GTGGACCAC G AAAATA
                        C AGG
GAM3580 LOC91409 3' CACCTGGGCCCATCA
                                  81130
                                         T GATT
                    CACCTGG GC TTATCA
                    GTGGACC CG GGTAGT
GAM3581 AXIN1 3' GCTGTGCTGTGGTGGACGTG 81133
                                         _ T A
                    GC GTG CTG GTGGACGTG
                    CG CAC GAC CACCTGCAC
                     A AC
GAM3581 FE65L2 5' GTTGCGTGTTTCCGTGTG 81134
                                            Α
                    GTTGCGTG TCTG GTG
                    CAACGCAC AGGC CAC
                       AA A
GAM3581 FE65L2 5' GTTGCGTGTTTCCGTGTG 81134
                                            Α
                    GTTGCGTG TCTG GTG
                    CAACGCAC AGGC CAC
                        AA A
GAM3581 FE65L2 5' GTTGCGTGTTTCCGTGTG 81134
                                            Α
                    GTTGCGTG TCTG GTG
                    CAACGCAC AGGC CAC
                        AA A
GAM3581 FE65L2 5' GTTGCGTGTTTCCGTGTG 81134
                                            Α
                    GTTGCGTG TCTG GTG
                    CAACGCAC AGGC CAC
                       AA A
GAM3581 GFAP
             3' GTGCACTGGGGTGGACGTG 81135
                    GTGT CTG GTGGACGTG
                    CACG GAC CACCTGCAC
                      T CC
GAM3581 ODC1
             3' AGTAGCGTGTCTGAAGAGTG 81136 T
                                              GT C
                    AGT GCGTGTCTGA GGA GTG
                    TCA CGCACAGACT TCT CAC
                     Т
GAM3581 SRGAP2 3' AAGTTGCTGTCTGAGACCCATG 81137
                                             G
                                                 TGGA
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AAGTTGC TGTCTGAG CGTG

TGGACCATG GGG AGTG

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TTCAACG ACAGACTC GTAC
                           TGG
GAM3581 FLJ21156 3' AGTTCACATTGAGTGGATGTG 81138 G TG C
                                                    С
                     AGTT CG T TGAGTGGA GTG
                     TCAA GT A ACTCACCT CAC
                      _ GT _
GAM3581 KIAA1718 3' GTTATTGCTGAGTGGGTGTG 81139
                                           CG T
                                                  AC
                     GTTG TG CTGAGTGG GTG
                     CAAT AC GACTCACC CAC
                      A CA
GAM3581 LOC155038 3' AAGTTGTGTGTCACAGGGGTGT 81140
                                              C TG T AC
        G
                     AAGTTG GTGTC AG GG GTG
                     TTCAAC CACAG TC CC CAC
                       A TG CA
GAM3582 CPSF2 3' AAACCAGATGCTTTAAATC 81143
                     AAACCA AT CTTTAAATC
                     TTTGGT TA GAAATTTAG
                       CC
GAM3582 FENS-1 3' TATAGAGAAAAACACTTTAAAT 81144
                                              CC
                     TATA AGAAA AATACTTTAAAT
                     ATAT TCTTT TTGTGAAATTTA
GAM3582 HSPC019 3' TAAGAAACCAGTTACCATAAAT 81145
                                              A T
        С
                     TAAGAAACCA TACT TAAATC
                     ATTCTTTGGT ATGG ATTTAG
                         CA T
GAM3582 LNX
            3' TAAGAAATTTACCTTAAATC 81146
                                          CCAA
                     TAAGAAA TACTTTAAATC
                     ATTCTTT ATGGAATTTAG
                        AA
GAM3582 LOC115073 3' TAAGAAACCATTTACACAAAAT 81147
                                               A TTT
                     TAAGAAACCA TAC AAAT
                     ATTCTTTGGT ATG TTTA
                         AA TGT
GAM3582 LOC255520 3' TACAAGAAACCAATTTTTAAAT 81148
                                                AC
                     TATAAGAAACCAAT TTTAAAT
                     ATGTTCTTTGGTTA AAATTTA
GAM3582 LOC63929 3' TAAGAAATCAACTTTAAAT 81149
                                            C AT
                     TAAGAAA CA ACTTTAAAT
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ATTCTTT GT TGAAATTTA
                        Α ___
GAM3583 ARHGEF12 3' TTTAAGCTTATTTAATAT 81152
                                              G
                     TTTAAGCTTATT TAATAT
                     AAATTCGAATAA ATTATA
GAM3583 XRCC5 3' CCCTTGTAATATATG
                                  81153
                     CTT TTGTAATATATATG
                     GGG AACATTATATAC
GAM3583 CMG2
             3' TTCAAGCTAGAGGATATATATG 81154
                                              TATTGTA
                     TTTAAGCT
                              ATATATATG
                     ||||||||
                     AAGTTCGA
                                TATATATAC
                        TCTCC
GAM3583 PLSCR4 3' TTTAAGCTTACTTTGTATATG 81155
                                               GTAATA
                     TTTAAGCTTATT TATATG
                     AAATTCGAATGA
                                   ATATAC
                          AAC
GAM3583 TAF1B 3' TCTAAGCACACTTGATATAT 81156
                                             T GTA
                      TTTAAGC TATT ATATATAG
         G
                     AGATTCG GTGA TATATATC
                        T AC
                                             C T _
GAM3583 LOC115123 3' TCTAAGTTTAATATATATATAT 81157
         ATG
                       TTTAAG TTA TGTA ATATATATG
                     AGATTC AAT ATAT TATATATAC
                        A T A
GAM3584 FLJ20825 3' TAATTTTTTTACTTTTTGTAG 81160
                                              G A
                     TAATTTTTTA TTTTT TAG
                     ATTAAAAAAAT AAAAA ATC
                          G C
GAM3584 GCN2
             3' TAATTTTTTTAGTTTTTATAGA 81161
                     TAATTTTTTAGTTTTTATAGA
                     ATTAAAAAAATCAAAAATATCT
GAM3584 KIAA1972 3' TTCTAATTTTTATAGATT 81162
                     TTTTAGTTTTTATAGATT
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AAGATTAAAAATATCTAA

TTGTG GA GT TTCTTGGG

CA C GG

3' TTGTGTGAAGTCTCTTGGG 81165

GAM3585 ARHH

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AACAC CT CA GAGAACCC
                      A_ T __
GAM3585 C12orf2 3' TTGTGCAGGAGTTTTGG 81166
                                        ACGT C
                    TTGTGCAG GGTT TTGG
                    AACACGTC TCAA AACC
                       C_____
GAM3586 AF5Q31 3' TGATGTGACACAGTGTTGT 81169
                                         G
                                            TG
                    TGATG TGACACA GTTGT
                    ACTAC ACTGTGT CAACA
                         CA
GAM3586 ANXA9 5' TGAGGTGGGTGTCGTTGTTGT 81170 T ACACATG
                    TGA GGTG
                             GTTGTTGT
                    ACT CCAC
                             CAACAACA
                     CCACAG
GAM3586 KIAA1458 3' TGGTGGTGACATGTGAGCT 81171 A
                                            CA
                    TG TGGTGACA TG GTT
                    AC ACCACTGT AC CGA
                     С
                        AC T
GAM3586 KIAA1940 5' TGATGGTGGTGCAGC 81172
                                          ACACA T T
                    TGATGGTG TGGT GT GT
                    ACTACCAC ACCA CG CG
                       C____ T
GAM3586 PEG10 3' ATGATGGTAAGGTGTTGT 81173
                                          CACAT T
                    ATGATGGTGA GGT GTTGT
                    TACTACCATT CCA CAACA
GAM3586 PSR
            3' TGATGGTGATGGTGCTG 81174
                                         CACA T
                    TGATGGTGA TGGT GTTG
                    ACTACCACT ACCA CGAC
           3' TGATGGTACATAATTGT 81175
GAM3586 RI58
                                       GAC
                    TGATGGT ACATGGTTGT
                    ACTACCA TGTATTAACA
                                          ACACA ____
GAM3586 RYBP
            5' TGGTGGGGTGGCATACTGTTGT 81176
                    TGGTG TGGT TGTTGT
                    ACCAC ACCG ACAACA
                      CCC__ TATG
                                           ACACA T
GAM3586 LOC146227 5' ATGATGGTGGTGGTGGT 81177
                    ATGATGGTG TGGT GT
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TACTACCAC ACCA CA
                        C____ C
GAM3586 LOC146237 3' TGATGGTGACCGTGACTGT 81178
                                              ACA GT
                     TGATGGTGAC TG TGT
                     ACTACCACTG AC ACA
                         GC TG
GAM3586 LOC150147 5' TGGTGGCATAGCTGTTGT 81179
                                            ACA
                     TGGTG CATGGTTGTTGT
                     ACCAC GTATCGACAACA
                       С
GAM3586 LOC150311 5' ATGATGGTGATAGTAGGTTTTG 81180
                                                CACAT G
         Т
                     ATGATGGTGA GGTT TTGT
                     TACTACCACT CCAA AACA
                         ATCAT
GAM3586 LOC152137 3' TGTGGTGACACATGCCTGT 81181
                                                 G
                     TG TGGTGACACATG TTGT
                     AC ACCACTGTGTAC GACA
                           G
GAM3586 LOC161734 3' ATGATGGTGACGTATAGATGAG 81182
                                                AC T TT
                     ATGATGGTGAC ATGGTG GT
         Т
                     TACTACCACTG TATC AC CA
                         CA T T
GAM3586 LOC257443 3' TGGTGGTGACATGTGAGCT 81171 A
                                               CA
                     TG TGGTGACA TG GTT
                     AC ACCACTGT AC CGA
                      С
                          AC T
                                             AC GG
GAM3586 LOC51029 3' TGATGGTGACTATAACTGT 81183
                     TGATGGTGAC AT TTGT
                     ACTACCACTG TA GACA
                         A_{-} TT
GAM3587 ABCE1 3' GTTTAGATAATGTGCTCT 81186
                                         GT
                     GTT GATAATGTGCTCT
                     CAA CTATTACACGAGA
                      ΑT
GAM3587 BHMT
             3' TCGACAGTAAGATGTGATGTG 81187
                                                  TAA
                     TCGATAGT TGTGA TGTG
                     AGCTGTCA ACACT ACAC
                        TTCT
GAM3587 KIAA1729 3' TCGGGGTTGTGCCATCTGTGCT 81188
                                             ATA
                                                  ATAA
        CT
                      TCG GTTGTG TGTGCTCT
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AGC CAACAC ACACGAGA
                     CC_ GGTAG
GAM3587 LOC220933 5' GATATTGTGATAAAAACT 81189 G TGT
                    GATA TTGTGATAA GCT
                    CTAT AACACTATT TGA
                          TT
GAM3587 LOC221495 3' TCTGTAGTTGCAGGGTGTGTTC 81190 GA GATAA C
        Т
                    TC TAGTTGT TGTG TCT
                    AG ATCAACG ACAC AGA
                         TCCC A
                     AC
GAM3588 BRPF1 3' TGAAATAAATACAAACCAGTT 81193
                                          Α
                    TGAAA TAAATACAAA GGTT
                    ACTTT ATTTATGTTT TCAA
                           GG
GAM3588 EGF 3' TGAAAATACATACAAATTC 81194
                                         A AG
                    TGAAAATA ATACAA GTTC
                    ACTITIAT TATGTT TAAG
                       G
GAM3588 FGF12 3' TGATGATAAATGGTTCCT 81195
                                       AA
                                           ACAAA
                    TGA ATAAAT GGTTCCT
                    ACT TATTTA CCAAGGA
                     AC
            3' TGAAGATAAAATACGGTCCCTG 81196 A _ AAA
GAM3588 GARS
                    TGAA ATAAA TAC GGTTCCTG
                    ACTT TATTT ATG CCAGGGAC
                      СТ
GAM3588 HDAC2 3' TGAAAATAAATACAGTCCATG 81197
                                             AAG C
                    TGAAAATAAATACA GTTC TG
                    ACTITIATITATGT CAGG AC
                          ___ T
GAM3588 MS4A7 3' TGAAAATAATACAGAAACAGCC 81198
                                           A AGGT_
        TG
                     TGAAAATAA TACA A T CCTG
                    ACTITIATT ATGIT G GGAC
                        _ CTTTC
GAM3588 PTP4A2 3' TGAAAATAGTGCAAGAGCCCCT 81199
                                            AATA AG
                     TGAAAATA CAA GTTCCTG
        G
                    ACTITIAT GTT CGGGGAC
                       CAC_ CT
GAM3588 RENT1 3' TGGGAATAAATAAGAGTCCCTG 81200 AA
                                               CAAA
                    TG AATAAATA GGTTCCTG
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AC TTATTTAT TCAGGGAC
                     CC
                          TC__
GAM3588 SIRT1 3' TGAACGTAAATACAATAATCCT 81201 AA AG T
        G
                    TGAA TAAATACAA GT CCTG
                    ACTT ATTTATGTT TA GGAC
                           AT _
                     GC
            3' TGGGAACAAATATAGATAATCG 81202
GAM3588 SYN3
                                          CAAA
                                                    Ш
        GTTCCTGC
                        TAAATA GGTTCCTG C
                    GTTTAT CCAAGGAC G
                      ATCTATTAG
GAM3588 SYN3 3' TGGGAACAAATATAGATAATCG 81202
                                          CAAA
                                                    Ш
        GTTCCTGC
                        TAAATA
                               GGTTCCTG C
                    GTTTAT CCAAGGAC G
                      ATCTATTAG
                                 Ш
GAM3588 SYN3 3' TGGGAACAAATATAGATAATCG 81202
                                          CAAA
                                                    Ш
        GTTCCTGC
                        TAAATA
                                 GGTTCCTG C
                    GTTTAT CCAAGGAC G
                      ATCTATTAG
                               III
GAM3588 ZNF207 3' AAAATAAATGTCCAATAGTTCC 81203
                                          A__ A
                     AAAATAAAT CAA GGTTCCTG
        TG
                    TTTTATTTA GTT TCAAGGAC
                       CAG A
GAM3588 AF053356_CDS3 3' GAAAATGAGTACAAATCCCTG 81204
                                              AAA AG
                    GAAAAT TACAA GTTCCTG
                    CTTTTA ATGTT TAGGGAC
                      CTC
GAM3588 CGGBP1 3' TGAAATAAATACAAAAAT 81205
                    TGAAA TAAATACAAAGGT
                    ACTTT ATTTATGTTTTTA
GAM3588 DKFZp434N2030 5' GAAACCTACAGAGGTTCCTG 81206 ATAAA A
                    GAAA TACA AGGTTCCTG
                    CTTT ATGT TCCAAGGAC
                     GG C
GAM3588 DKFZP564J0863 3' TGAAAATAGACACAGGCT 81207
                                               AA
                    TGAAAATA ATACA GGTT
                    ACTITIAT TGTGT CCGA
                       С
GAM3588 FLJ11294 3' TGAAAACCTCATTGAGGGTTCC 81208 AAATACAAA
        TG
                     TGAAAAT GGTTCCTG
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GAGTAACTC
GAM3588 FLJ14917 3' GAAAATAGATACAAGGAACTG 81209 A A TTC
                     GAAAATA ATACAA GG CTG
                     CTTTTAT TATGTT CC GAC
                        C _ TT_
GAM3588 GTF3C3 3' TAAAAATAAATACACTGTT 81210
                                              AAG
                     TGAAAATAAATACA GTT
                     ATTTTTATTTATGT CAA
                          GA
GAM3588 KIAA1671 3' TGGAAATAAATACAAGAGT 81211 A
                                               AG
                     TG AAATAAATACAA GT
                     AC TTTATTTATGTT CA
                      С
                           CT
GAM3588 KIAA1952 5' TGAAATAAGTGTAGCAGTTCCT 81212
                                           A ATACAAA
        G
                     TGAAA TAA GGTTCCTG
                     ACTTT ATT
                               TCAAGGAC
                       _ CACATCG
GAM3588 MLCB
             3' TGAGAATAAATACAACAGG 81213
                     TGA AATAAATACAA AGG
                     ACT TTATTTATGTT TCC
                           G
GAM3588 NX-17 3' TGAAAATATATACATATGCCTG 81214
                                            A AAG T
                     TGAAAATA ATACA GT CCTG
                     ACTITIAT TATGT TA GGAC
                        A A C
GAM3588 PRO2266 3' TGAAAATAAATATATGAATAAC 81215
                                              CAAAGGTT
        CTG
                      TGAAAATAAATA CCTG
                     IIII
                     ACTTTTATTTAT
                                   GGAC
                         ATACTTATT
GAM3588 USP24 3' TGAAAATAAGGCAGGACCT 81216
                                            ATACAA TT
                     TGAAAATAA AGG CCT
                     ACTITIATT TCC GGA
                        CCG____T_
GAM3588 LOC144193 3' TGAAAATAAATCTATCCCT 81217
                                              ACAAAG
                     TGAAAATAAAT
                                 GTTCCT
                     ACTTTTATTTA
                                 TAGGGA
                         GΑ
GAM3588 LOC153727 5' GAAAGAATATAAGATTCCTG 81218
                                            ATA CA
                     GAAA AATA AAGGTTCCTG
```

ACTTTTG

CCAAGGAC

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CTTT TTAT TTCTAAGGAC
                      C__ A_
GAM3588 LOC221773 3' TGAAAATCAATACAAAAAAAAA 81219
                                                  TTC_
                                            Α
         CTG
                      TGAAAAT AATACAAAGG CTG
                     ACTITTA TTATGTTTTT GAC
                       G
                            TTTT
GAM3588 LOC51004 3' TGAAAATATGTATGATGGGTCC 81220
                                              AATACAAA T
         TG
                      TGAAAATA GG TCCTG
                     ACTTTTAT CC AGGAC
                        ACATACTA C
GAM3588 LOC91408 3' TGAAAAAAAATACAAGAGCT 81221
                                                AG
                     TGAAAA AAATACAA GTT
                     ACTTTT TTTATGTT CGA
                       Т
                           CT
GAM3589 MYO1E 3' CTACTTAGTACATTCATACAT 81224
                                            AA CC
                     TTACTTGG ACA CATACAT
                     GATGAATC TGT GTATGTA
                        A_{-} AA
GAM3589 C1orf19 3' TCACTTGGAACATCTTTGTGCA 81225
                                             ACACCCATA
         TAT
                      TTACTTGGAA
                                   CATAT
                     AGTGAACCTT
                                  GTATA
                         GTAGAAACAC
GAM3589 DKFZP434P0714 3' TTACTTGAAAATGCACATA 81226
                                                 CACCCA
                     TTACTTGGAAA TACATA
                     AATGAACTTTT
                                 GTGTAT
                         AC
GAM3589 WDR7 3' CTTGGAAACTACATA
                                81227
                                         ACCCA
                     CTTGGAAAC TACATA
                     GAACCTTTG ATGTAT
GAM3589 LOC135293 3' TTACTTGAAAATATTAACTTCA 81228
                                            C____ C_
                                                       Ш
         TACATATA
                         GGAAA AC CATACATAT A
                     CTTTT TG GTATGTATA T
                       ATAAT AA
```

GAM3589 LOC149175 3' TTACTTGAGAATACCAGTTCAT 81229 GA C CATA

AT TTACTTG AA ACC CATAT

|||||| || ||| ||||

AATGAAC TT TGG GTATA

TC A TCAA

GAM3589 LOC219347 3' TTACTTGGGAACATCAACCAT 81230 A C___

TTACTTGG AACA CCAT

```
AATGAACC TTGT GGTA
C AGTT
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GAM3589 LOC90488 3' TTACCTGGCACATTATACATAT 81231 AA CCC

TTACTTGG ACA ATACATAT

AATGGACC TGT TATGTATA

G_ AA_

GAM3589 LOC91250 5' TTACTTGGACATGCAT 81232 AACACC A

TTACTTGGA CAT CAT

AATGAACCT GTA GTA

С

GAM3590 KLK3 3' AGTCTTGGCCTGGTCATTTCC 81235 CA AAA

AGTTT GTTT TCATTTCC

TCAGA CGGA AGTAAAGG

AC CC

GAM3590 SLC25A15 3' TAAGTTTCCGTTCCTCATTTCC 81236 A AAA

TAAGTTTC GTTT TCATTTCC

ATTCAAAG CAAG AGTAAAGG

G G

GAM3590 TRRAP 3' TAAGTTTCAGCTCTGCCATTTC 81237 AAA

C TAAGTTTCAGTTT TCATTTCC

ATTCAAAGTCGAG GGTAAAGG

AC

GAM3590 YWHAG 3' AATTCCAGTAAATCATTTCC 81238 TT

AGTTTCAGT AAATCATTTCC

TTAAGGTCA TTTAGTAAAGG

GAM3590 CGGBP1 3' AGGTTCAAACAGAGATCATTTC 81239 T TTTAA

C AG TTCAG ATCATTTCC

TC AAGTT TAGTAAAGG

C TGTCTC

GAM3590 FLJ13150 3' GCTTTAGTAGCTGTCATTTCC 81240 C TTAAA

GTTT AGT TCATTTCC

CGAA TCA AGTAAAGG

A TCGAC

GAM3590 FLJ20651 3' AGGTTCAGTTTTCACATTTCC 81241 T AAAT

AG TTCAGTTT CATTTCC

TC AAGTCAAA GTAAAGG

C AGT_

GAM3590 GREB1 3' AGTTTCAGTGCCATTT 81242 TTAAA

AGTTTCAGT TCATTT

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TCAAAGTCA GGTAAA
                         C_
GAM3590 KIAA1715 3' AGTTTCAGTTTCCTATTTCC 81243
                                             AAATC
                     AGTTTCAGTTT ATTTCC
                     TCAAAGTCAAA TAAAGG
                          GGA
GAM3590 LAP3
                                            AAA
             3' TTTCAGTTTGCTCATGTTCC 81244
                     TTTCAGTTT TCAT TTCC
                     AAAGTCAAA AGTA AAGG
                         CG C
GAM3590 My015 3' AATTTCAGTACTTCATTT 81245
                                           TTAAA
                     AGTTTCAGT TCATTT
                     TTAAAGTCA AGTAAA
                         TGA__
GAM3590 ZNF221 5' TAAATTCCAACTTTAAGTCATT 81246
                                                Α
         Т
                      TAAGTTTCAG TTTAA TCATTT
                     ATTTAAGGTT AAATT AGTAAA
                         G C
GAM3590 LOC145482 3' CAAGTTTCAGTTTAAGAATC 81247
                     TAAGTTTCAGTTTAA ATC
                     GTTCAAAGTCAAATT TAG
                           CT
GAM3590 LOC147080 5' AGCTTCAGTATTTGTCATTT 81248
                                              TTAAA
                     AGTTTCAGT TCATTT
                     TCGAAGTCA
                               AGTAAA
                         TAAAC
GAM3590 LOC152860 3' GTTGTTTTTTAAATCATTTCC 81249
                                            TCAG
                     GTT TTTAAATCATTTCC
                     CAA AAATTTAGTAAAGG
                      CAAA
GAM3590 LOC200314 3' AAGTTTCAGAAAGTGTCATTTC 81250
                                               TTTAAA
         C
                      AAGTTTCAG TCATTTCC
                     TTCAAAGTC
                                AGTAAAGG
                         TTTCAC
GAM3590 LOC219654 3' AATTTCAGGCTCATTTC
                                   81251
                                            TTTAAA
                     AGTTTCAG
                               TCATTTC
                     TTAAAGTC
                               AGTAAAG
                        CG_{-}
GAM3591 ZNF146 3' TATAGTTCATGGTCTA
                                  81254
                                        Т
                                            CTTAAG
                     TAT GTTCATGG
                                  TCTA
```

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ATA CAAGTACC AGAT
                      Т
GAM3592 AEGL1 3' TTAAGGCAGGTGTTGGA 81257
                                          TTGTT
                     TTAAGGC GTGTTGGA
                     AATTCCG CACAACCT
                        TC
GAM3592 BAZ2A 5' AAGGTTGGTGTTGGA
                                 81258
                                        C TT
                     AAGG TTG GTGTTGGA
                     1111 111 11111111
                     TTCC AAC CACAACCT
GAM3592 BMPR1B 3' TCAAGGCTTGTACTGTGGA 81259
                                              TG T
                     TTAAGGCTTGT TGT GGA
                     AGTTCCGAACA ACA CCT
                         TG _
GAM3592 FACL2 3' TTAAGGCTCATTTTGGA 81260
                                          TG GTG
                     TTAAGGCT TT TTGGA
                     AATTCCGA AA AACCT
                        GT ___
GAM3592 GJB3
            5' TCAAGGCCAGGCTGTTGG 81261
                                           T TG
                     TTAAGGCT GT TGTTGG
                     AGTTCCGG CG ACAACC
                        TC __
GAM3592 IGF2R 3' TTAAGGCTTCTTATAGG 81262
                                          G TT
                     TTAAGGCTT TTGTG GG
                     AATTCCGAA AATAT CC
                        G
                                          TT G
GAM3592 KDR
            3' TTAAGGCTTGGCTTGG
                                 81263
                     TTAAGGCTTG GT TTGG
                     AATTCCGAAC CG AACC
GAM3592 MTMR3 3' TTAAGGCTGTTTTTGGA 81264
                                           T GTG
                     TTAAGGCT GTT TTGGA
                     AATTCCGA CAA AACCT
                        _ A__
GAM3592 ODF2
             3' TTAAGGCCTGTCGAGGA
                                  81265
                                            TGTT
                     TTAAGGCTTGTTG GGA
                     AATTCCGGACAGC CCT
                          T__
GAM3592 OXTR
             3' TCAAGGCTTATTTGG
                                 81266
                                           GTGT
                     TTAAGGCTTGTT TGG
```

AGTTCCGAATAA ACC

GAM3592 PDE4D 3' TTAAGGCTGACGTGGG 81267 TT TT TTAAGGCT G TGTG GG AATTCCGA C GCAC CC _ T __ GAM3592 TRIM9 5' AGGCCTTGTTGTTGG 81268 AGGC TTGTTGT GTTGG TCCG AACAACA CAACC G GAM3592 DKFZP586A0522 3' TTAAGACTTGAGAACTGGA 81269 **TTGTG** TTAAGGCTTG TTGGA AATTCTGAAC GACCT TCTT_ GAM3592 FLJ20506 3' TCAAGGCTTGCCTGG 81270 TGTG TTAAGGCTTGT TTGG AGTTCCGAACG GACC GAM3592 FTSJ1 3' TCAGGGCTTGTTTGTCCAGG 81271 A G TTA GGCTTGTT TGTT GG AGT CCGAACAA ACAG CC _ GT GAM3592 KIAA0254 3' TAAGGCTGATGTTTGG 81272 ΤT TAAGGCT G TGTGTTGG ATTCCGA C ACACAACC _ T GAM3592 KIAA0295 3' TCAAGGCCATGTTGG **TGTT** 81273 TTAAGGCT GTGTTGG AGTTCCGG TACAACC GAM3592 KIAA1576 3' CTAAGGCTTGTTGGTGGA 81274 ТТ TTAAGGCTTGTTG GT GGA GATTCCGAACAAC CA CCT GAM3592 KIAA1906 3' TTAAGACTTCAGTTTGGA 81275 GTT G TTAAGGCTT GT TTGGA AATTCTGAA CA AACCT GT_ _ GAM3592 LHX6 3' TCAAGGCAGAGTGTGTTGG 81276 TTGT TTAAGGC TGTGTTGG

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TCTC
GAM3592 MGC1842 3' TCAAGGCTTGGGGTCTTGG 81277
                                            TT G
                     TTAAGGCTTG GT TTGG
                     AGTTCCGAAC CA AACC
                         CC G
GAM3592 P4HA2 3' TTAAGGCTTCTGGTAGG 81278
                                           GTT
                     TTAAGGCTT TTG GT GG
                     AATTCCGAA GAC CA CC
                        _ _ T
GAM3592 STRBP
             5' AAGGCTTGTTCTCTGGA 81279
                                           GTG
                     AAGGCTTGTT TTGGA
                     TTCCGAACAA GACCT
                         GA
GAM3592 TRIM2 3' TTAGGGCTTGCTCCACTAG 81280
                                         Α
                                             G GT
                     TTA GGCTTGTT T TGG
                     AAT CCGAACGA G ATC
                      С
                          G TG
GAM3592 LOC118851 5' TTAAGTGTTGGAGTTGGA 81281
                                           GCT T_
                     TTAAG TGTTG GTTGGA
                     AATTC ACAAC CAACCT
                           CT
GAM3592 LOC124152 3' TTAAAGCTTGTTTGCAATGA 81282
                                               G TG
                     TTAAGGCTTGTT TGT GA
                     AATTTCGAACAA ACG CT
                          TTA
GAM3592 LOC126536 3' TCAAGGCTTGTTGTCCTGA 81283
                                               G
                     TTAAGGCTTGTTGT TTGG
                     AGTTCCGAACAACA GACT
                          G
GAM3592 LOC144453 3' AAAGCCATGTTGTGTTGGA 81284
                     AAGGCT TGTTGTGTTGGA
                     TTTCGG ACAACACAACCT
                       Т
GAM3592 LOC149103 3' AGGTTATTTGGTGTTGGA 81285
                                          С
                     AGG TTGTT GTGTTGGA
                     TCC AATAA CACAACCT
                        AC
GAM3592 LOC150290 3' TTAAGGCTCTGGCTCTGG 81286
                                             GTT G
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TTAAGGCTT GT TTGG

AGTTCCG ACACAACC

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AATTCCGAG CG GACC
                        AC_ A
GAM3592 LOC155435 3' AGGTCGGACTGTGTTGGA 81287
                                          C __
                    AGG TTG TTGTGTTGGA
                    TCC AGC GACACAACCT
                      _{-} CT
GAM3592 LOC163782 5' TTAAGGCTGGTCGATGG 81288
                                           T TGT
                    TTAAGGCT GTTG TGG
                    AATTCCGA CAGC ACC
                        СТ
GAM3592 LOC196529 3' TTAAGACTTGAGAACTGGA 81269
                                             TTGTG
                    TTAAGGCTTG TTGGA
                    AATTCTGAAC GACCT
                        TCTT_
GAM3592 LOC254295 3' TCAAGGCTATGTTGG
                                  81289
                                          TGTT
                    TTAAGGCT GTGTTGG
                    AGTTCCGA TACAACC
GAM3592 LOC58489 3' TTAAGGCTTTTAAATGTGGA 81290
                                             GTT T
                    TTAAGGCTT GTGT GGA
                     AATTCCGAA TACA CCT
                        AATT
GAM3592 LOC90630 5' TTAGGGCTTGTTCCTGCAGG 81291
                                              GT
                    TTA GGCTTGT T TGT GG
                    AAT CCGAACA G ACG CC
                      С
                         AG T
GAM3592 LOC91208 5' TTAGGGCTTGTTCCTGCAGA 81292 A G T
                    TTA GGCTTGT T TGT GG
                    AAT CCGAACA G ACG CT
                      C
                         AG T
GAM3593 NBEA 3' TAGCAGCTGGTGTTCAGTC 81295
                                              ΑT
                    TAGCGGCTGGTGTTCG GTC
                     ATCGTCGACCACAAGT CAG
GAM3593 SLC9A1 3' ACGTGGTTGTCGATGTCAC 81296
                                          GC GT
                     GCG TGGT TCGATGTCAC
                     TGC ACCA AGCTACAGTG
                      _ AC
GAM3593 DKFZp434A1520 3' TAGCGGGTGGACGCTGATGTCA 81297
                                                 C _ C
        С
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TAGCGG TGG TGTT GATGTCAC

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ATCGCC ACC GCGA CTACAGTG
                       CT
GAM3593 FLJ22056 3' CAGCGGCTGCTGGGTGTCAC 81298
                                             G TTCGA
                    TAGCGGCTG TG TGTCAC
                    GTCGCCGAC AC ACAGTG
                        G CC
GAM3593 FLJ32865 3' GGCTGGGTGACCTCAC
                                  81299
                                         T TC G
                    GGCTGG GT GAT TCAC
                    CCGACC CA CTG AGTG
                       _ __ G
GAM3593 GFR
            3' AGTGGCTTTTGGTGATGTCAC 81300 C GG TTC
                    AG GGCT TG GATGTCAC
                    TC CCGA AC CTACAGTG
                     A AA CA_
GAM3593 PAPOLG 3' GGTTGGTAACAATGTCA 81301 C TT
                    GG TGGTG CGATGTCA
                    CC ACCAT GTTACAGT
                     A T_
GAM3593 LOC133634 3' AGTGGCTGATGATGTCA
                                   81302 C
                                            GTTC
                    AG GGCTGGT GATGTCA
                    TC CCGACTA CTACAGT
GAM3593 LOC158835 5' GCGGCTGGGGCAGATGTCA 81303
                                             T TC
                    GCGGCTGG GT GATGTCA
                    CGCCGACC CG CTACAGT
                       CT_{-}
GAM3593 LOC221931 3' TGGTTGCTCTGATGTCAC 81304
                    TGGT GTTC GATGTCAC
                    ACCA CGAG CTACAGTG
                      A A
GAM3594 CHRNB4 3' AGAAGTGTGTGAGGAAC 81307 C AGA A
                    AG AAGT TG TGAGGAAC
                    TC TTCA AC ACTCCTTG
                     _ C___
GAM3594 CKMT1 3' AGCAAGTAGAATGGGCCA 81308
                                           TG A AA
                    AGCAAGTAGA ATG GG CCA
                    TCGTTCATCT TAC CC GGT
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GAM3594 COL1A2 3' AGCAAGTAGATGTGCAG

81309

AGCAAGTAGATG TG GG

A A

TCGTTCATCTAC AC TC

_ G

GAM3594 DLEC1 3' GCAGCTGGATGCTGGGACCAG 81310 A A_ A A GCA GT GATG TG GGA CCAG

CGT CG CTAC AC CCT GGTC
_ AC G _ _

GAM3594 FUS1 3' GCAGGTAGGTCGGAAGAATCAG 81311 A ATGAT C

GCA GTAG GAGGAA CAG

CGT CATC CTTCTT GTC

C CAGC_ A

GAM3594 FUT1 3' ACAGGTGGATGACAAGGTCAG 81312 A A TG AAC

GCA GT GATGA AGG CAG

TGT CA CTACT TCC GTC

C C GT A

GAM3594 GGA3 3' GCAAGGGGCAGGAGGAACCAG 81313 TAGATGAT

GCAAG GAGGAACCAG

CGTTC CTCCTTGGTC

CCCGTCC_

GAM3594 GGA3 3' GCAAGGGGCAGGAGGAACCAG 81313 TAGATGAT

GCAAG GAGGAACCAG

CGTTC CTCCTTGGTC

CCCGTCC

GAM3594 MAP1A 3' AGCAGGGGATGAGAAGGGATCA 81314 A TA T AAC

G AGCA G GATGA GAGG CAG

TCGT C CTACT TTCC GTC

_ CC C CTA

GAM3594 MNT 3' AGCGGGTGGATGATGAGG 81315 AA A

AGC GT GATGATGAGG

TCG CA CTACTACTCC

CC C

GAM3594 PDE4A 3' AAGTGGAAAGCGGGAACCAG 81316 A TGA A

AAGT GA TG GGAACCAG

TTCA CT GC CCTTGGTC

C TTC _

GAM3594 SPG4 3' AGCAAGCAGAAGGAAC 81317 TGATG

AGCAAGTAGA AGGAAC

TCGTTCGTCT TCCTTG

GAM3594 BSMAP 3' AGCGGGGACAAGGAGGAACCAG 81318 AAGTA TG T

AGC GA A GAGGAACCAG

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TCG CT T CTCCTTGGTC
                     CCC__ GT C
                                         AT_ _
GAM3594 BZW1 3' GTAGGAAGATGTAAGAACCAG 81319
                    GTAG GATG AGGAACCAG
                    CATC CTAC TTCTTGGTC
                      CTT A
GAM3594 C20orf55 5' ACCGGAGAGATGAGGAGCCAG 81320 AAGT T A
                    GC AGA GATGAGGA CCAG
                    TG TCT CTACTCCT GGTC
                     GCC C
GAM3594 C5orf4 3' AGACAGGATGAGGAGCCA 81321
                                             Α
                    AGAT GATGAGGA CCA
                    TCTG CTACTCCT GGT
                      TC
                           C
GAM3594 DKFZp547I094 5' GCAGATGGGGAGGAACCA 81322
                                              ΑT
                    GTAGATG GAGGAACCA
                    CGTCTAC CTCCTTGGT
                       CC
GAM3594 DKFZp761K1423 3' GTAGGTGGTGATGAGGAAC 81323
                    GTAG TGATGAGGAAC
                    CATC ACTACTCCTTG
                      CACC
GAM3594 FLJ12788 3' AGCAGGACTACAGAGGAACCAG 81324
                                            GAT
                    AGTAG AT GAGGAACCAG
                    TCGTC TG CTCCTTGGTC
                      C ATGT
GAM3594 HRIHFB2122 3' GCTGGAGACAGAGGGGGACCAG 81325 AAGT GAT A
                    GC AGAT GAGG ACCAG
                    CG TCTG CTCC TGGTC
                     ACC_ T__ CCC
GAM3594 KIAA0125 3' GCAGGTGCTGGGAACCA
                                   81326
                                         A A A
                    GTAG TG TG GGAACCA
                    CGTC AC AC CCTTGGT
                      CG
GAM3594 KIAA0265 3' AGCAAGTATGGATGGAACCAG 81327
                                             GAT GA
                    AGCAAGTA GAT GGAACCAG
                    TCGTTCAT CTA CCTTGGTC
                       AC_ _
GAM3594 KIAA1023 3' AGCAAGAGATGGGCAC
                                  81328
                                         T ATGA A
                    AGCAAG AGATG GG AC
```

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_ ___ G
GAM3594 KIAA1032 3' GCAGCGTGGGGAACCAG 81329 A A A
                    GTAG TG TG GGAACCAG
                    CGTC GC AC CCTTGGTC
                     _ _ C
GAM3594 KIAA1508 3' AGCGGGTAGTGAAAA 81330
                                        AA A
                    AGC GTAG TGATGAGGA
                    TCG CATC ACTACTTTT
                     CC
GAM3594 MGC32043 3' GCAAGTGATGAGACC 81331
                                        AGAT
                                               GA
                    GCAAGT GATGAG ACC
                    CGTTCA CTACTC TGG
GAM3594 MKRN1 3' AGCAGTAGATGGACAAACCAG 81332 A AT G
                    AGCA GTAGATG GA GAACCAG
                    TCGT CATCTAC CT TTTGGTC
                     _ G
GAM3594 NCOA5 3' AGTAAGTGGGAGGAGGCCA 81333
                                          A AT A
                    AGTAG TG GAGGA CCA
                    TCATT AC CTCCT GGT
                      C C CC
GAM3594 NS1-BP 5' CAAGTAGAAGGACGAGGGCCA 81334
                                            Т
                                                 AA
                     CAAGTAGA GATGAGG CCAG
        G
                    GTTCATCT CTGCTCC GGTC
                       TC
                           CC
GAM3594 OSBPL7 3' GCAGGAGGAGTGAGGAACCAG 81335
                                           AT_ _
                    GTAG GA TGAGGAACCAG
                    CGTC CT ACTCCTTGGTC
                     CTC C
GAM3594 USP28 3' GCAGGCAGCCAGGAACCA 81336
                                        A ATGATG
                    GCA GTAG
                             AGGAACCA
                    CGT CGTC TCCTTGGT
                     C GG_
GAM3594 LOC113828 3' AGTGGCGTGGGGAACCAG 81337
                                          AGA A A
                    AGT TG TG GGAACCAG
                    TCA GC AC CCTTGGTC
                     CC_ C
GAM3594 LOC136337 5' GCAGGTGAGGAACCAG
                                  81338
                                         ATGA
                    GTAG TGAGGAACCAG
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TCGTTC TCTAC CC TG

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CGTC ACTCCTTGGTC
                      C_{-}
GAM3594 LOC143903 5' GCGAGTCGCAGAGGGGAACCAG 81339 A AGAT TGA
                     GC AGT GA GGAACCAG
                     CG TCA CT CCTTGGTC
                     C GCGT CC
GAM3594 LOC144133 3' AGCAAGTAGAGATTTGCCA 81340
                                             T GAGGAA
                     AGCAAGTAGA GAT CCA
                     TCGTTCATCT CTA GGT
                         AAC
GAM3594 LOC146229 3' AGCAAGTAGGTGGTGTCAG 81341
                                              AAA
                     AGCAAGTAG TG TG GG
                     TCGTTCATC AC AC TC
                        C C AG
GAM3594 LOC147669 5' AAGTACCTGACTGAGGAAC 81342
                                            GA
                     AAGTA TGA TGAGGAAC
                     TTCAT ACT ACTCCTTG
                       GG G
GAM3594 LOC148894 3' AGCAAGTAGGTGTGGACCAA 81343
                                            A ATGA A
                     AGCAAGTAG TG GGA CCAG
                     TCGTTCATC AC CCT GGTT
                        C A_____
                                             AT_ _
GAM3594 LOC151579 3' GTAGGAAGATGTAAGAACCAG 81319
                     GTAG GATG AGGAACCAG
                     CATC CTAC TTCTTGGTC
                      CTT A
GAM3594 LOC152286 3' AGCAAGTAGATCGATGTTGAAC 81344
                                                AG
                     AGCAAGTAGAT GATG GAAC
                     TCGTTCATCTA CTAC CTTG
                         G AA
GAM3594 LOC152941 3' GCAATAGATATGAGGA
                                   81345
                                             Α
                                          G
                     GCAA TAGATG TGAGGA
                     CGTT ATCTAT ACTCCT
GAM3594 LOC155179 3' AGCAAGAGATGGGCAC
                                   81328
                                           T ATGA A
                     AGCAAG AGATG GG AC
                     TCGTTC TCTAC CC TG
                            _ G
GAM3594 LOC158191 3' CAGGTAGATGATGCCACC 81346 A
                                               AGGA
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CA GTAGATGATG ACC

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GT CATCTACTAC TGG
                     С
                          GG
GAM3594 LOC196759 3' GCAAGTAGAAGGTGAGCAA 81347 TGA G
                     GCAAGTAGA TGAG AA
                     CGTTCATCT ACTC TT
                        TCC G
GAM3594 LOC199864 3' GCAAGTAGAAGGTGAGCAA 81347
                                             TGA G
                     GCAAGTAGA TGAG AA
                     CGTTCATCT ACTC TT
                        TCC G
GAM3594 LOC221981 3' AGTGAATATTGAATGAGGAA 81348 CA GAT
                     AG AGTA GATGAGGAA
                     TC TTAT TTACTCCTT
                     AC AAC
GAM3594 LOC255031 5' GCGAAGAGCGGTGGGGAACCAG 81349 _ T A A A
                     GC AAG AG TG TG GGAACCAG
                     CG TTC TC GC AC CCTTGGTC
                     C _ _ C C
GAM3594 LOC255386 3' AGCAAGTAGAATGGGCCA 81308
                                             TG A AA
                     AGCAAGTAGA ATG GG CCA
                     TCGTTCATCT TAC CC GGT
GAM3594 LOC256273 3' AGCAAGCAGGTGGTGATCA 81350
                                              A A AG AC
        G
                     AGCAAGTAG TG TG GA CAG
                     TCGTTCGTC AC AC CT GTC
                        C C CA A_
GAM3594 LOC257169 3' GCAAGTAGAGGTGAACAA 81351
                                            TGA G
                     GCAAGTAGA TGAG AA
                     CGTTCATCT ACTT TT
                        CC_ G
GAM3594 LOC90485 3' GCGGGTGGATAACGAAGTCAG 81352 AA A
                                                   AAC
                     GC GT GATGATGAGG CAG
                     CG CA CTATTGCTTC GTC
                     CC C
                             Α
GAM3594 LOC96597 5' GCAGTTGGGGTCAGGAACCAG 81353
                                            A ATG
                     GTAG TG AGGAACCAG
                     CGTC AC TCCTTGGTC
                      A CCCAG
GAM3595 CSPG3 3' GCGAGAACAGTTTGG
                                 81356
                                        TTT
                     GCGGG AACAGTTTGG
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CGCTC TTGTCAAACC

GAM3595 ZFHX1B 3' GCAAAAACAGTTTGG 81357 TTT GCGGG AACAGTTTGG CGTTT TTGTCAAACC GAM3595 FLJ11726 3' TTCTTCTTTCCAAAGACAGTTT 81358 **GCGGGTTTA** GG TTCTTC ACAGTTTGG AAGAAG **TGTCAAACC AAAGGTTTC** GAM3595 KIAA0894 3' TTCTTTCGAAACACAGTTTGG 81359 CG TTTA TTCTT CGGG ACAGTTTGG AAGAA GCTT TGTCAAACC A TG GAM3595 LOC154792 5' TTCCTGACTTGTTTAACAGTTT 81360 C GG GG TTCTT GC GTTTAACAGTTTGG AAGGA TG CAAATTGTCAAACC C AA GAM3596 PRO0097 3' GTAGATAAGGGAAGAGATAAG 81363 AATGT GTAGATAAG GATAAG CATCTATTC **CTATTC CCTTCT** GAM3596 LOC149566 5' TATCGTAGATGAAGACATCGA 81364 ATG TATCGTAGAT AAGA TGA ATAGCATCTA TTCT GCT C GTA GAM3597 RFXAP 3' TCCAGATTACTTATCATTTT 81367 A CT T TC AGATTACTTA TC ATTTT AG TCTAATGAAT AG TAAAA G GAM3597 TAC1 3' AACCACTTATTTCTATTTTA 81368 С GATTACTTA TTCTATTTTA TTGGTGAAT AAGATAAAAT GAM3597 TAC1 3' AACCACTTATTTCTATTTTA 81368 С **GATTACTTA TTCTATTTTA** TTGGTGAAT AAGATAAAAT Α

3' AACCACTTATTTCTATTTTA 81368

GATTACTTA TTCTATTTTA

C

GAM3597 TAC1

```
TTGGTGAAT AAGATAAAAT
GAM3597 TAC1 3' AACCACTTATTTCTATTTTA 81368
                                           С
                     GATTACTTA TTCTATTTTA
                     TTGGTGAAT AAGATAAAAT
                                             _ __ TC
GAM3597 BHMT
             3' TCAAGATTTACTTTGTACTTAT 81369
         TTT
                      TCAAGATT ACT TACT TATTTT
                     AGTTCTAA TGA ATAAAA
                        A AAC
GAM3597 PGR1
             3' TCAAGATCTTATCTTCTATTTT 81370
                                            TA _
         Α
                     TCAAGAT CTTA CTTCTATTTTA
                     AGTTCTA GAAT GAAGATAAAAT
                         Α
GAM3598 DPP4
           3' CAAAGCCTCCATAAAAACAATT 81373
                                           AA
                                              Α
                     CAAA TTTCA TAAAAACAATT
                     GTTT GAGGT ATTTTTGTTAA
                       CG
GAM3598 RANBP2L1 3' ACAAAAATTTCTCAACAAT 81374
                                              AATAAA
                     ACAAAATTTC AACAAT
                     TGTTTTTAAAG
                                  TTGTTA
                         AG
GAM3598 FLJ11011 3' ACAAAAGTTTCAATAAAA 81375
                                          Α
                     ACAAAA TTTCAATAAAA
                     TGTTTT AAAGTTATTTT
                       C
GAM3598 FLJ20274 3' ACAAAAACTTCACTAAACAATT 81376
                                               ATAA
                     ACAAAAATTTCA AAACAATT
                     TGTTTTTGAAGT TTTGTTAA
                          GA
GAM3598 KIAA0336 3' ACAAAAATTTCTCAACAAT 81374
                                             AATAAA
                     ACAAAAATTTC
                                  AACAAT
                     TGTTTTTAAAG
                                  TTGTTA
                         AG
GAM3598 KIAA0342 3' ACAAGCATTTCAAGGAAACAAT 81377
                                            AA
                                                 TAA
```

TGTT TAAAGTT TTTGTTAA

CG CC_

GAM3598 MAIL 3' ACAAAAATTTCAACAGAACA 81378 AA

ACAAAAATTTCAATA AACA

||||||||||||||||||||||||||||

ACAA ATTTCAA AAACAATT

Т

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TGTTTTTAAAGTTGT TTGT
                          C_{-}
                                              AAAA
GAM3598 NMES1 3' ACAAAAATTTCAATATGCAAT 81379
                    ACAAAAATTTCAATA CAAT
                    TGTTTTTAAAGTTAT GTTA
                          AC__
GAM3598 LOC220692 3' ACAAAAATTTCTCAACAAT 81374
                                            AATAAA
                    ACAAAAATTTC AACAAT
                    TGTTTTTAAAG
                                 TTGTTA
                         AG
GAM3599 APOL1 3' TCCCATTTTTCCCTTATTGCAG 81382
                                          CAC
                                                Α
        GC
                      TCCCA TTTTCC ATTGCAGGC
                    AGGGT AAAGGG TAACGTCCG
                      AA
                           AA
            5' CCTTCACTTCCGGTTGCAGGC 81383 CA TT AA
GAM3599 BAT1
                    CC CACT TCC TTGCAGGC
                    GG GTGA AGG AACGTCCG
                     AA _ CC
GAM3599 BAT1
            5' CCTTCACTTCCGGTTGCAGGC 81383 CA TT AA
                    CC CACT TCC TTGCAGGC
                    GG GTGA AGG AACGTCCG
                     AA __ CC
GAM3599 COL15A1 3' CAACTTTTCCAGCAAG 81384 C
                                            ATT
                    CA ACTTTTCCA GCAGG
                    GT TGAAAAGGT CGTTC
GAM3599 DAZ
            3' TCCTTTACTTTTCCTTAAGG 81385
                                       CAC
                                             AA C
                    TCC ACTTTTCC TTG AGG
                    AGG TGAAAAGG AAT TCC
                     AAA
            3' TCCCTTACTTTTCCTTAAGG 81386
GAM3599 DAZL
                                        AC
                                             AA C
                    TCCC ACTTTTCC TTG AGG
                    AGGG TGAAAAGG AAT TCC
                      AΑ
```

G _____

GAM3599 GNB3 3' ACACTTTATTGCAGG 81388 TCCA

ACACTTT ATTGCAGG

||||||| ||||||||

5' TCCCCCACTATTGCAG 81387

AGGG GTGA

TCCC CACT ATTGCAG

TAACGTC

A TTTCCA

GAM3599 DTX1

TGTGAAA TAACGTCC

```
GAM3599 MRPL49 3' TCCCCAGCCTTGATTGCAGG 81389 A TCCA
                    TCCC CA CTTT ATTGCAGG
                    AGGG GT GGAA TAACGTCC
                     _ C C___
GAM3599 NID 3' TCCCAACTTTTCCTAGTCAGGC 81390
                                        C AATTG
                    TCCCA ACTTTTCC CAGGC
                    AGGGT TGAAAAGG GTCCG
                         ATCA
GAM3599 RAB26 3' TCCCACATTTTATCACAAGGC 81391 C CCA TG
                    TCCCACA TTTT AT CA GGC
                    AGGGTGT AAAA TA GT CCG
                      GT T
GAM3599 SEC13L1 5' CATCTTTTCCAGCACAAGC 81392 _ ATT
                    CA CTTTTCCA GCAGGC
                    GT GAAAAGGT TGTTCG
                    Α
                        CG_{-}
GAM3599 TRIM9 3' TCCCATGTTTTTCCAAACA 81393 CAC TT
                    TCCCA TTTTCCAA GCA
                    AGGGT AAAAGGTT TGT
                      ACA
GAM3599 FLJ12595 5' TCCCATTTTGTTTTGCAGGC 81394
                                       CAC CCAA
                    TCCCA TTTT TTGCAGGC
                    AGGGT AAAA AACGTCCG
                        CAA
GAM3599 FLJ20170 5' ACATTTTCAATTGCAGGC 81395 C C
                    ACA TTTTC AATTGCAGGC
                    TGT AAAAG TTAACGTCCG
GAM3599 FLJ20306 3' ACACTTTTTCATACAATAGGC 81396
                                          C AT ___
                    ACACTTTT CA TGCA GGC
                    TGTGAAAA GT ATGT CCG
                       A __ TAT
GAM3599 FLJ21459 3' CCAGCTTTTCCAGAAGCGG 81397
                                        CA ATT A
                    CCA CTTTTCCA GC GG
                    GGT GAAAAGGT CG CC
                     C_ CTT _
GAM3599 FLJ23027 5' TCCCACTCTTTTCCTGGGC 81398
                                            AATT
                    TCCCAC CTTTTCC GC
```

```
Α
                          ACC_
GAM3599 KCNB2 3' TCCCATTTTTTAGTTCACAGG 81399 CAC CCAA TG
        C
                     TCCCA TTTT T CAGGC
                    AGGGT AAAA A GTCCG
                      AA ATCA GT
GAM3599 KIAA0275 3' CACTTTTCCACATTGCAGGC 81400
                    CACTTTTCCA ATTGCAGGC
                    GTGAAAAGGT TAACGTCCG
GAM3599 KIAA0618 3' TCCCTACAGGATTGCAGG 81401
                                         CTTTTCCA
                    TCCC ACA
                              ATTGCAGG
                    AGGG TGT
                              TAACGTCC
                      A CC
GAM3599 MGC15634 3' TCCTGACTTCAGCTTTGCAGGC 81402 CAC TCCAA
                    TCC ACTTT TTGCAGGC
                    AGG TGAAG AACGTCCG
                     AC_ TCGA_
GAM3599 MGC17330 3' TCCCACACTATATGCAGG 81403
                                           TTTCCAAT
                               TGCAGG
                    TCCCACACT
                    AGGGTGTGA
                                ACGTCC
                        TAT
GAM3599 NYD-SP21 3' CACGTCTTCTGATTGCAGG 81404
                                           CA
                    CAC TTTTC ATTGCAGG
                    GTG AGAAG TAACGTCC
                     C AC
GAM3599 PTBP2 3' TCCCCACTTTTCTGAACAG 81405
                                            CAATT
                    TCCC CACTTTTC GCAG
                    AGGG GTGAAAAG TGTC
                         ACT
GAM3599 PTP4A1 3' TCCCATTCTTTTCTCAGG 81406
                                        CA CAATTG
                    TCCCA CTTTTC
                                 CAGG
                    AGGGT GAAAAG
                                  GTCC
                          A_
                      AA
GAM3599 SAE1
            3' CACACTTTTCTCTATAAGG 81407
                                          CAAT C
                    CACACTTTTC TG AGG
                    GTGTGAAAAG AT TCC
                        AGAT _
GAM3599 STAG2 3' TCCTACACTTTCTTCAGG 81408
                                       С
                                            CCAATTG
```

TCC ACACTTTT

CAGG

AGGGTG GAAAAGG CG

```
AGG TGTGAAAG
                                  GTCC
                      Α
                          AA
GAM3599 STAM2 5' TCCCAACTTTTCTCCCGGGGC 81409
                                           С
                                               CAA CA
                    TCCCA ACTTTTC TTG GGC
                    AGGGT TGAAAAG GGC CCG
                          AG C
GAM3599 STARD7 3' CCACATCCCAACAATTGCAGG 81410
                                            CT TC
                    CCACA TT CAATTGCAGG
                    GGTGT GG GTTAACGTCC
                      AG TT
GAM3599 STARD7 3' CCACATCCCAACAATTGCAGG 81410
                                            CT TC
                    CCACA TT CAATTGCAGG
                    GGTGT GG GTTAACGTCC
                      AG TT
GAM3599 STK3
            3' CACACTTTTTTGTGCAAG 81411
                                          CCAAT
                    CACACTTTT TGCAGG
                    GTGTGAAAA ACGTTC
                        AAC
GAM3599 TRAF2 3' TCTCACACTTTACCCGCAGGC 81412 C
                                              T AAT
                    TC CACACTTT CC TGCAGGC
                    AG GTGTGAAA GG GCGTCCG
GAM3599 WBSCR16 3' ACTTTTCCAAGCCAGGC 81413
                                            TTG
                    ACTTTTCCAA CAGGC
                    TGAAAAGGTT GTCCG
                        CG
GAM3599 ZNF294 3' CCACACTTTTATATTTTGGGC 81414
                                            CCA GCA
                    CCACACTTTT ATT GGC
                    GGTGTGAAAA TAA CCG
                        TA_ AAC
GAM3599 LOC144766 3' CCAGCACTTTTCCGGAAGG 81415
                                               AATTGC
                    CCA CACTTTTCC
                                  AGG
                     GGT GTGAAAAGG
                                   TCC
                      С
                          CCT
GAM3599 LOC146452 3' CACCTTTCCATCCTCCAGG 81416
                                             A_ G
                    CACTTTTCCA TT CAGG
                    GTGGAAAGGT GA GTCC
                        AG G
GAM3599 LOC151996 5' CCCACTTTTCTGCAGG
                                  81417 A
                                            CAAT
                    CC CACTTTTC TGCAGG
```

GG GTGAAAAG ACGTCC

GAM3599 LOC158428 3' CATATTTCCAATTGCAGGC 81418 CT CA TTTCCAATTGCAGGC GT AAAGGTTAACGTCCG ΑT GAM3599 LOC159176 3' CATACTGCCAGAATTGCAGGC 81419 C TTT __ CA ACT CCA ATTGCAGGC GT TGA GGT TAACGTCCG A C CT GAM3599 LOC255927 3' CACACTTTATTAAAAGCAGG 81420 TCC TT CACACTTT AA GCAGG GTGTGAAA TT CGTCC TAA TT GAM3599 LOC51696 3' CACATATTTTCCAAAGG 81421 С TTGC CACA TTTTCCAA AGG GTGT AAAAGGTT TCC ATA GAM3599 LOC89944 3' TCCCACCTTTCCCTGCAGG 81422 AAT TCCCAC CTTTTCC TGCAGG AGGGTG GAAAGGG ACGTCC GAM3599 LOC90826 5' TCCCATACTTTTCACAATTAGC 81423 С TCCCA ACTTTTC CAATT GC AGGGT TGAAAAG GTTAA CG T T GAM3599 LOC93589 3' TCCCACATTTCTCCATGGC 81424 ATT TCCCACA TTTTCCA GC AGGGTGT AAGAGGT CG AC_ GAM3599 LOC93622 3' ACTCATCCCAATTGTAGG 81425 С ACTT TTCCAATTG AGG TGAG AGGGTTAAC TCC Α GAM3600 GEM 3' TATCAAATGTTAAAATGGTT 81428 CA TATCAAATGTTA AAT GTT ATAGTTTACAAT TTA CAA T C GAM3600 MAP3K13 3' TATCAATGTTACAGTAGCT 81429 Α TATCAA TGTTACA TAGTT

| | | | ATAGTT ACAAT C | GT ATCGA | |
|------------|-------------------|------------|---|------------------------|-------|
| GAM3600 | BCAA | 3' TATCAA | ATGTTCCAGCTT TATCAAATGTT ATAGTTTACAA | TAGTTTT | ACAA |
| GAM3600 | KIAA1463 | 3' TACCA | G AATGTTAACATT | | CAATA |
| | | | TATCAAATGTTA ATGGTTTACAA | 2000 | |
| GAM3600 | LOC121441 3' TATC | | TG AAATGTACAATA | A 81432 | Т |
| | | | TATCAAATGT A ATAGTTTACA T | | |
| GAM3600 | LOC1535 | 16 3' CATC | _ AAGTGTTACAAT | ΓGΔTTTT 81 <i>1</i> 33 | A A |
| CA INIOCOC | TT | | TATCAA TGTT. GTAGTT ACAAT | ACAAT GTTTTTT | |
| GAM3600 | LOC1584 | 50 5' TCAA | C C ATGTAACAATAC TCAAATGT ACA AGTTTACA TGT | ATA TT | T G |
| GAM3600 | LOC1585 | 04 5' TCAA | T G ATGTAACAATAC TCAAATGT ACA AGTTTACA TGT | ATA TT | T G |
| GAM3601 | CAST | 3' AAGGG(| T G CAAACTGAAAATA AAG CAAAC AA TTC GTTTG TT CC AC | | A_ CA |
| GAM3601 | KLHL1 | 3' TACAAA | ACAAATTACCAA TACAAGACAA ATGTTTTGTT | ACCAA | |
| GAM3601 | MTMR2 | 3' CACAA | TAA GACAGACTGAA TACAAGACA GTGTTCTGT | AACCAAA | |
| GAM3601 | NRAS | 3' AAACAA | CTGAC ACCAAACAGCA | AT 81440 | ААТА |

AGACAAACCAAA CAAT

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GTC_
GAM3601 ABCA5 5' CACAAGACAGACCAAAAA 81441
                                          Α
                     TACAAGACA ACCAAAAA
                     GTGTTCTGT TGGTTTTT
                        C
GAM3601 BAG5
             3' TACAGATCACAAAAATACAAT 81442 A _ AAC
                     TACA GA CA CAAAAATACAAT
                     ATGT CT GT GTTTTTATGTTA
                      _ A _
GAM3601 C1QR1
             3' TACAAGAACAGACCAAAACACA 81443
                                             _ A
                                                  Α
        ΑT
                      TACAAGA CA ACCAAAA TACAAT
                     ATGTTCT GT TGGTTTT GTGTTA
                        T C
GAM3601 FLJ22004 3' TACAAAACCCAAAAATA 81444
                                           AAA
                     TACAAGAC CCAAAAATA
                     ATGTTTTG GGTTTTTAT
GAM3601 FLJ25006 3' ACAAACAGAAAAATACAA 81445
                                          С
                     ACAAAC AAAAATACAA
                     TGTTTG TTTTTATGTT
                       TC
GAM3601 KIAA0826 3' TACAACACAAACCAACAGCTAC 81446
                                            G
                                                 AAA
         AAT
                      TACAA ACAAACCAA TACAAT
                     ATGTT TGTTTGGTT ATGTTA
                       G
                           GTCG
GAM3601 KIAA1679 3' TACAAAACAAAATACA
                                  81447
                                           CCAAAA
                     TACAAGACAAA ATACA
                     ATGTTTTGTTT
                                 TATGT
GAM3601 KIAA1735 3' CAAGACAAACTGTATTGGAAAT 81448
                                             CAA
                                                       Ш
         ACAATA
                        ACAAAC
                                 AAATACAAT A
                     TGTTTG TTTATGTTA T
                       ACATAACC
GAM3601 MAIL
            3' TACAAGACATACTGGGTCAAAC 81449
                                             A CAAAAAT_
         AAT
                      TACAAGACA AC ACAAT
                     ATGTTCTGT TG
                                   TGTTA
                        A ACCCAGTT
GAM3601 NDST3 5' CAGGACTCACAGAAAATACA 81450
                                          A AA CA
```

CA GAC AC AAAATACA

11 111 11 11111111

TTTGTTTGGTTT GTTA

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GT CTG TG TTTTATGT
                     C AG TC
           3' TACAAAACAAACACCCTACAAT 81451
GAM3601 pcnp
                                          CAAAAA
                    TACAAGACAAAC TACAAT
                    ATGTTTTGTTTG ATGTTA
                        TGGG
GAM3601 TRAF3 3' CACAAGACAGACTAGACACA 81452
                                           A CAAAA
                    TACAAGACA AC ATACA
                    GTGTTCTGT TG TGTGT
                       C ATC
GAM3601 LOC220936 3' CAAGACAAATTAGAAAAACAAT 81453
                                             CCAA T
                    CAAGACAAA AAA ACAAT
                    GTTCTGTTT TTT TGTTA
                       AATC T
GAM3601 LOC221509 3' AGACAAACCAGTATTACAAT 81454
                                            AAAA
                    AGACAAACCA TACAAT
                    TCTGTTTGGT ATGTTA
                        CATA
GAM3602 ABCB9 3' TCCGTGAAGGCGTTGGC 81457 C GCC
                    TCCGTGGA GGCG GGC
                    AGGCACTT CCGC CCG
                       _ AA_
GAM3602 ABCC12 3' TCCGTGGATGGGAGGGC 81458
                                           CCCC
                    TCCGTGGA GG GG GGC
                    AGGCACCT CC CT CCG
                       A CC
GAM3602 ADRA1A 3' CGTGGACGGGAAGCTGGC 81459
                                           C C
                    CGTGGACGG GGC GGC
                    GCACCTGCC TCG CCG
                       CT A
GAM3602 AHR
            5' CCACTGCGGCGGCCGGC 81460
                                       _ GA
                    CCG TG CGGCGGCCGGC
                    GGT AC GCCGCCGGCCG
                     G _
GAM3602 ALDOA 5' TCCGTGGACGGAGTGTGG 81461
                                           C CC
                    TCCGTGGACGG GG GG
                    AGGCACCTGCC TC CC
```

_ ACA

TC GT CGGCGGCCGGC

GAM3602 BAZ1B 5' TCGGTCCCGGCGGCCGGC 81462 C GGA

```
AG CA GCCGCCGGCCG
                      C GG_
GAM3602 BCL7A 5' TCCATGGGAGACAGCCGG 81463
                                           AC
                     TCCGTGG GGCGGCCGG
                     AGGTACC CTGTCGGCC
                        CT
GAM3602 EDARADD 5' TCCGAGCGGGGCTGGC
                                    81464
                                           TACC
                     TCCG GG CGG GGC GGC
                     AGGC TC GCC CCG CCG
                      _ _ A
GAM3602 FBXL3A 5' TCCGGGGACGGCGGCGGC 81465
                                           Т
                                                C
                     TCCG GGACGGCGGC GGC
                     AGGC CCTGCCGCCG CCG
                                              C__ C
GAM3602 GALNT1 3' TCCATGGACAGGAAGGCTGG 81466
                     TCCGTGGACGG GGC GG
                     AGGTACCTGTC CCG CC
                         CTT A
GAM3602 GJA5
            3' TCCGTAGATGAAGTACTGGC 81467
                                            C CG C
                     TCCGTGGA GG GC GGC
                     AGGCATCT CT TG CCG
                        A TCA A
GAM3602 GPR30
             5' TCCGTGGAGGCGAGGGC 81468
                                              CC
                     TCCGTGGA GGCGG GGC
                     AGGCACCT CCGCT CCG
                           \mathsf{C}_{-}
GAM3602 GPR48 5' TCCATGGACGCGCAGAGGC 81469
                                              CC
                     TCCGTGGACG GCGG GGC
                     AGGTACCTGC CGTC CCG
                         G T
GAM3602 LBX1
            3' CCGCTGGTGGCGGCCGGC 81470
                                          AC
                     CCG TGG GGCGGCCGGC
                     GGC ACC CCGCCGGCCG
                      GA_{-}
GAM3602 MTCP1
             5' CCCGGACCGCGGCCGGC 81471
                                         G G
                     CC TGGAC GCGGCCGGC
                     11 11111 11111111
                     GG GCCTG CGCCGGCCG
GAM3602 NFATC2 5' TCCGGGGACGGCGCCCTGGC 81472
                                             Т
                     TCCG GGACGGCG GCC GGC
```

```
AGGC CCTGCCGC CGG CCG
                      C
                          G A
GAM3602 NRG1 3' TCCGCGGACGCGTGGGC 81473
                                          G GCC
                    TCCGTGGACG CG GGC
                    AGGCGCCTGC GC CCG
                        _ AC_
GAM3602 PTS
                                        GGA _
            5' CCCGCCGCGCGGCCGG
                                 81474
                    TCCGT CG GCGGCCGG
                    GGGCG GC CGCCGGCC
                      G
GAM3602 RALBP1 3' TCTGTGGATGCACCAGGC 81475
                                        C CG G
                    TC GTGGA GCG CC GGC
                    AG CACCT CGT GG CCG
                     A A_ _ T
GAM3602 SACM2L 3' TCCATGGAGATGACCGGC 81476
                                           C GC
                    TCCGTGGA G GGCCGGC
                    AGGTACCT C CTGGCCG
                       _ TA
GAM3602 SACM2L 3' TCCATGGAGATGACCGGC 81476
                                           C GC
                    TCCGTGGA G GGCCGGC
                    AGGTACCT C CTGGCCG
                       _ TA
GAM3602 SECTM1 3' CCCTCAGGGCGGCCGGC 81477
                                         GT AC
                    TCC GG GGCGGCCGGC
                    GGG TC CCGCCGGCCG
                     AG __
                                        CG
GAM3602 SMURF1 3' TCTATGGACAACAGTGGC 81478
                                              CC
                    TC TGGACGGCGG GGC
                    AG ACCTGTTGTC CCG
                     ΑT
                          \mathsf{A}_{-}
GAM3602 ST14
                                        G GA
            5' TCCCTGCCGGCGGCCGGC 81479
                    TCC TG CGGCGGCCGGC
                    AGG AC GCCGCCGGCCG
                     GG
GAM3602 TJP1
            5' TCCGCTGGCTCAGCCGGC 81480
                                        _ ACGG
                    TCCG TGG CGGCCGGC
                    AGGC ACC GTCGGCCG
                      G GA__
GAM3602 TRADD 3' CCCGTGGATGGACAGGGG 81481
                                           C _ CC
                    TCCGTGGA GG CGG GG
```

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GGGCACCT CC GTC CC
                       ATC_
GAM3602 TRAF5 5' TCCTGGCTGCGGCCGGC 81482 G ACG
                    TCC TGG GCGGCCGGC
                    AGG ACC CGCCGGCCG
                     _ GA_
GAM3602 WHN 3' CCCGATGTGGGCGGCCGGC 81483
                                        _ GAC
                    TCCG TG GGCGGCCGGC
                    GGGC AC CCGCCGGCCG
                     T AC
GAM3602 ZNF236 3' CCGTGGATGCGCTCCCGGC 81484
                                          CG G
                    CCGTGGA GCG CCGGC
                    GGCACCT CGC GGCCG
                      A GAG
                                        СС
GAM3602 C22orf4 3' TCCATGGAGGAACCGG
                                81485
                    TCCGTGGA GG GGCCGG
                    AGGTACCT CC TTGGCC
GAM3602 CDC14B 5' TCCTGCCGCGGCCGGC
                                       G GA G
                                 81486
                    TCC TG CG CGGCCGGC
                    AGG AC GC GCCGGCCG
                     _ G_ _
GAM3602 CDC14B 5' TCCTGCCGCGGCCGGC 81486
                                       G GA G
                    TCC TG CG CGGCCGGC
                    AGG AC GC GCCGGCCG
                     _ G_ _
                                       G GA G
GAM3602 CDC14B 5' TCCTGCCGCGGCCGGC 81486
                    TCC TG CG CGGCCGGC
                    AGG AC GC GCCGGCCG
                     _ G_ _
GAM3602 CHAF1B 3' TCCATGGAAGCCCTGG 81487
                                         C GG _
                    TCCGTGGA GGC CC GG
                    AGGTACCT TCG GG CC
                       _ _ A
                                       T ACG _
GAM3602 COTL1 5' TCCGGGGCCGGCCGAGC 81488
                    TCCG GG GCGGCCG GC
                    AGGC CC CGCCGGC CG
                           Т
                                          __ c c
GAM3602 DGKD
            3' TCCATGGACTTGGAGCTGGC 81489
                    TCCGTGGAC GG GGC GGC
```

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AGGTACCTG CC TCG CCG
                       AA _ A
GAM3602 DKFZP434C245 5' TCCATGGAGCCACTGGC 81490 CG G C
                    TCCGTGGA GC GC GGC
                    AGGTACCT CG TG CCG
                       __ G A
                                             C GC
GAM3602 DKFZP564J102 5' TCCGTGGATGAGCCGG 81491
                    TCCGTGGA G GGCCGG
                    AGGCACCT C TCGGCC
GAM3602 FLJ31564 5' TCCGGGCAGGCGGCCGGC 81492 T AC
                    TCCG GG GGCGGCCGGC
                    AGGC CC CCGCCGGCCG
                     GT
GAM3602 FLJ32356 5' TCCTGGGCGGCCGGCCGGC 81493 G A
                    TCC TGG CGGC GGCCGGC
                    AGG ACC GCCG CCGGCCG
                     _ C GC
GAM3602 GEMIN7 5' TCAGTGGACAAACATTTGGC 81494 C
                                             GCC
                    TC GTGGACGG CG GGC
                    AG CACCTGTT GT CCG
                         T AAA
GAM3602 HSP105B 5' CCCGGGGACAGCGGCGGC 81495
                                               С
                                          Т
                    TCCG GGACGGCGGC GGC
                    GGGC CCTGTCGCCG CCG
                      С
GAM3602 KIAA0153 3' CCCGTGGAGTGCCCGGC 81496
                                          CG GG
                    TCCGTGGA GC CCGGC
                    GGGCACCT CG GGCCG
                       CA __
GAM3602 KIAA0435 3' TCCTTGTAGGGCGGCCGGC 81497
                                         G GAC
                    TCC TG GGCGGCCGGC
                    AGG AC CCGCCGGCCG
                     A ATC
GAM3602 KIAA1276 5' TCCTGGGGCAGCCGGC 81498
                                        G AC
                    TCC TGG GGCGGCCGGC
                    AGG ACC CCGTCGGCCG
GAM3602 KIAA1337 3' CCGTGAGCAGGCGGCCGGC 81499
                                           GA _
```

CCGTG C GGCGGCCGGC

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GGCAC G CCGCCGGCCG
                      TC T
GAM3602 KIAA1813 3' CCTGTGAACAGGGTTGGC 81500 C CC
                    CC GTGGACGG GG GGC
                    GG CACTTGTC CC CCG
                     A _ AA
GAM3602 LCHN 5' TCCGGGGCGGCCGGC
                                 81501
                                        T ACG
                    TCCG GG GCGGCCGGC
                    AGGC CC CGCCGGCCG
GAM3602 MGC15438 3' CCCGGGCGCGGCCGGC
                                   81502
                                          TAG
                    TCCG GG CG CGGCCGGC
                    GGGC CC GC GCCGGCCG
GAM3602 MGC16332 5' TCCTGGAACAGCAGGTCGGC 81503 G _ _ C
                    TCC TGGA CGGC GG CGGC
                    111 1111 1111 11 1111
                    AGG ACCT GTCG CC GCCG
                     _ T T A
GAM3602 NBL1
            5' TCGGCGAGGCGGCCGGC 81504 C AC
                    TC GTGG GGCGGCCGGC
                    AG CGCT CCGCCGGCCG
                     С
                                               C ___
GAM3602 NEUROG3 3' CCCGTGGAGGCCTGGGCCGGC 81505
                    TCCGTGGA GGC GGCCGGC
                    GGGCACCT CCG CCGGCCG
                        GAC
                                          GGA G
GAM3602 NTSR2 5' CCCGCTCCCGCGGCCGGC 81506
                    TCCGT CG CGGCCGGC
                    GGGCG GC GCCGGCCG
                      AGG _
GAM3602 PANX1 5' TCCGGGTACAGCCGGC
                                        T ACG
                                 81507
                    TCCG GG GCGGCCGGC
                    AGGC CC TGTCGGCCG
                      _ A__
GAM3602 PRKCZ 5' TCCGCGGAACTCCGGC
                                 81508
                                          CG GG
                    TCCGTGGA GC CCGGC
                    AGGCGCCT TG GGCCG
                        __ A_
                                 81509 G AC
GAM3602 QKI
            5' CCCCGGGGCGGCCGGC
                    CC TGG GGCGGCCGGC
```

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GG GCC CCGCCGGCCG
                     G
GAM3602 RAB10 5' TCCGAGGGCGGCGACCGCGGC 81510 T A
                    TCCG GG CGGCGGCC GGC
                    AGGC CC GCCGCTGG CCG
                     T C
                           CG
GAM3602 RDH-E2 5' TCCGCGGAGAAGCCGGC 81511
                                          CC
                    TCCGTGGA GG GGCCGGC
                    AGGCGCCT CT TCGGCCG
GAM3602 SCAMP-4 3' CCTGTGGACGGCAGAGGC 81512 _
                                              CC
                    CC GTGGACGGCGG GGC
                    GG CACCTGCCGTC CCG
                          Т
GAM3602 SLC37A1 5' TCCGTGGAGCGGCTGCCGGC 81513
                                            G
                    TCCGTGGA CGGC GCCGGC
                    AGGCACCT GCCG CGGCCG
                       C A
GAM3602 SMARCF1 5' TCCGCGGAGAGACCCGGC 81514
                                           C GG
                    TCCGTGGA GGC CCGGC
                    AGGCGCCT CTG GGCCG
                       CT
GAM3602 SMARCF1 5' TCCGCGGAGAGACCCGGC 81514
                                           C GG
                    TCCGTGGA GGC CCGGC
                    AGGCGCCT CTG GGCCG
                       CT
GAM3602 SMARCF1 5' TCCGCGGAGAGACCCGGC 81514
                                           C_ GG
                    TCCGTGGA GGC CCGGC
                    AGGCGCCT CTG GGCCG
                       CT __
GAM3602 SPS
            5' CCGGGCGCGGCCGGC
                                81515
                                      TAG
                    CCG GG CG CGGCCGGC
                    GGC CC GC GCCGGCCG
GAM3602 SRCRB4D 5' TCCATGGAGCTGGCTGG 81516
                                          CG _ C
                    TCCGTGGA GC GGC GG
                    AGGTACCT CG CCG CC
                       __ A A
GAM3602 LOC124895 5' CCTGGAGCTGGCGGCCGGC 81517 G C_
                    CC TGGA GGCGGCCGGC
```

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GG ACCT CCGCCGGCCG
                     _ CGA
GAM3602 LOC126295 5' CCGTGGCCTCGCGGCCGGC 81518
                                            ACG
                    CCGTGG GCGGCCGGC
                    GGCACC CGCCGGCCG
                       GGAG
GAM3602 LOC126526 5' TCCTGGAGGAATGCCGGC 81519 G C CG_
                    TCC TGGA GG GCCGGC
                    AGG ACCT CC CGGCCG
                     _ _ TTA
GAM3602 LOC129080 3' TCCCTGGAGGCAGCTGGC 81520
                    TCC TGGA GGCGGC GGC
                    AGG ACCT CCGTCG CCG
                     G A
GAM3602 LOC145725 3' CCCGTGGACGACACCTGG 81521
                                              G
                    TCCGTGGACGGCG CC GG
                    GGGCACCTGCTGT GG CC
GAM3602 LOC145732 3' CCCGTGGACGACACCTGG 81521
                                              G
                    TCCGTGGACGGCG CC GG
                    GGGCACCTGCTGT GG CC
                         _ A
GAM3602 LOC146346 5' TCCTGGACAACACGG 81522
                                             GC
                                        G
                    TCC TGGACGGCG CGG
                    AGG ACCTGTTGT GCC
                                            CG GG
GAM3602 LOC147791 5' TCCGCGGATGCCCCGGC 81523
                    TCCGTGGA GC CCGGC
                    AGGCGCCT CG GGCCG
                       A_ G_
GAM3602 LOC151475 3' TCCGTAGATGAACAGGGC 81524
                                            C CC
                    TCCGTGGA GGCGG GGC
                    AGGCATCT TTGTC CCG
                       AC
GAM3602 LOC196957 3' CCCGTGGACGACACCTGG 81521
                                              G _
                    TCCGTGGACGGCG CC GG
                    GGGCACCTGCTGT GG CC
GAM3602 LOC196961 3' CCCGTGGACGACACCTGG 81521
                                              G _
                    TCCGTGGACGGCG CC GG
```

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GGGCACCTGCTGT GG CC
                          _ A
GAM3602 LOC197138 3' CCCGTGGACGACACCTGG 81521
                                              G _
                    TCCGTGGACGGCG CC GG
                    GGGCACCTGCTGT GG CC
                         _{-} A
GAM3602 LOC199992 5' TCCGCGGGCCGGCCAGC
                                   81525
                                           ACG
                    TCCGTGG GCGGCCGGC
                    AGGCGCC CGCCGGTCG
GAM3602 LOC203276 3' TCCATGGAGCAGCTGGC 81526
                                            CG C
                    TCCGTGGA GCGGC GGC
                    AGGTACCT CGTCG CCG
                           Α
GAM3602 LOC203305 3' TCCATGGAGCAGCTGGC 81526
                                            CG C
                    TCCGTGGA GCGGC GGC
                    AGGTACCT CGTCG CCG
                       __ A
GAM3602 LOC204579 5' TCCGTGGACGCGGATGC
                                            G CCG
                                   81527
                    TCCGTGGACG CGG GC
                    AGGCACCTGC GCC CG
                        _ TA_
                                             CG G __
GAM3602 LOC219513 5' TCCGCGGAGCCGCCCCGGC 81528
                    TCCGTGGA GC GCC GGC
                    AGGCGCCT CG CGG CCG
                        G GG
GAM3602 LOC222486 5' CCTATGGTGCGGCGGCCGGC 81529
                                            Α
                    CC GTGG CGGCGGCCGGC
                    GG TACC GCCGCCGGCCG
                     A AC
GAM3602 LOC245727 3' CCCGTGGACGACACCTGG 81521
                                              G _
                    TCCGTGGACGCG CC GG
                    GGGCACCTGCTGT GG CC
                         _ A
GAM3602 LOC253367 3' CCGTATTGCAGCGGCCGGC 81530
                                            GA
                    CCGTG CGGCGGCCGGC
                    GGCAT GTCGCCGGCCG
                      AAC
```

GAM3602 LOC254243 3' TCCATGGAGCAGCTGGC 81526

TCCGTGGA GCGGC GGC

CG C

```
AGGTACCT CGTCG CCG
                           Α
GAM3602 LOC57862 5' TCCGGGAAGCCGGCCGGC 81531 T C
                    TCCG GGA GGC GGCCGGC
                    AGGC CCT TCG CCGGCCG
                      _ _ G
GAM3602 LOC89941 3' TCCCTGACAGCGGTGGCCGGC 81532
                                            GG __
                    TCC TG ACGGC GGCCGGC
                    AGG AC TGTCG CCGGCCG
                     G CCA
GAM3602 LOC90038 3' TCCATGGAGCAGCTGGC 81526
                                           CG C
                    TCCGTGGA GCGGC GGC
                    AGGTACCT CGTCG CCG
                           Α
                                            G CC
GAM3602 LOC91179 5' CCCGTGGACGCCAGGGC 81533
                    TCCGTGGACG CGG GGC
                    GGGCACCTGC GTC CCG
                        G ___
GAM3602 LOC91828 5' TCCGCGGAGATGGCGCCGGC 81534
                                             C G
                    TCCGTGGA GGCG CCGGC
                    AGGCGCCT CCGC GGCCG
                       CTA
GAM3602 LOC91828 3' TCCCTGCCAGCGGCCGGC 81535
                                          G GA
                    TCC TG CGGCGGCCGGC
                    AGG AC GTCGCCGGCCG
                     GG_{-}
GAM3602 LOC91978 5' TCCGTGAAACCGGCCGGC 81536
                                            CGG
                    TCCGTGGA CGGCCGGC
                    AGGCACTT GCCGGCCG
                       TG
GAM3603 ZNF142 5' TGTGCGACCGCCTCCGGCTC 81539 C
                                               GTC
                    TG GCGACCGCCTC GTTC
                    AC CGCTGGCGGAG CGAG
                          GC_{-}
GAM3604 ATRX
            3' TGACAAATGTCAGGAAGAAATG 81542
                                            A AAT C
                    TGACAAATG CA GA AAATG
                    ACTGTTTAC GT TT TTTAC
                        A CC_ C
GAM3604 ATRX 3' TGACAAATGTCAGGAAGAAATG 81542
                                            A AAT C
```

TGACAAATG CA GA AAATG

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ACTGTTTAC GT TT TTTAC
                        A CC_ C
GAM3604 EGR3 3' TGACAAAGGAGCAAATGA 81543
                                         Τ__
                    TGACAAA GA CAAATGA
                    ACTGTTT CT GTTTACT
                       C
GAM3604 HLA-DQA1 3' TGACAAATGATCTGGTAAATGA 81544
                                          CAAA AC
                    TGACAAATGA TG AAATGA
                    ACTGTTTACT AC TTTACT
                        AG CA
GAM3604 ISL1
           3' CAAATGACATGAAAAGTG 81545
                                         AA C A
                    CAAATGACA TGA AA TG
                    GTTTACTGT ACT TT AC
                        __ T C
                                                G _
GAM3604 KCNS3 3' TGAGTAAATGACAAACACAGAA 81546 C
        TGA
                      TGA AAATGACAAAT ACA AATGA
                    ACT TTTACTGTTTG TGT TTACT
                     CA
                          _ C
GAM3604 MMP20 3' TAACAAATGATGGCCAAATGA 81547
                                             CAAA A
                    TGACAAATGA TG CAAATGA
                    ATTGTTTACT AC GTTTACT
                         CG
GAM3604 YWHAZ 3' GACAGCATGGATGACAAATG 81548 A ACAA
                    GACA ATG ATGACAAATG
                    CTGT TAC TACTGTTTAC
                      CG C_
GAM3604 DKFZp434C0328 5' TGAAAACTACTAGTGACAAATG 81549 C G AAA
        Α
                     TGA AAAT AC TGACAAATGA
                    ACT TTTG TG ACTGTTTACT
                     _ A ATC
GAM3604 DKFZP434P0721 3' ATGATAAATGACAGATAATGA 81550 C
                    ATGA AAATGACA AATGA
                    TACT TTTACTGT TTACT
                          CTA
                      Α
GAM3604 FLJ14600 3' TGAAACAAATGACAAATG 81551
                                        CAAAT
                    TGA GACAAATGACAAATG
                    ACT TTGTTTACTGTTTAC
GAM3604 HMP19 3' TGACAAATGAATTTACAGGTGA 81552
                                             CAAATG AA
```

TGACAAATGA ACA TGA

```
ACTGTTTACT TGT ACT
                        TAAA_ CC
GAM3604 KIAA0557 3' TGACTAGGTGACAAATGCAATG 81553 AAA
                                                 A A
                    TGAC TGACAAATG CAA TG
                    ACTG ACTGTTTAC GTT AC
                      ATCC
GAM3604 KIAA0731 3' ATGACAAACCCCAGATGA 81554
                                           GA A
                    ATGACAAAT CA ATGA
                    TACTGTTTG GT TACT
                       GG C
                                         AC AC____
GAM3604 KIAA1843 3' TGACAAATGGAAATGTATTCAT 81555
        AAATGA
                       ACAAATG AAATGA
                    TGTTTAC TTTAC
                                  TTTACT
                       C ATAAGTA
GAM3604 TRIP-Br2 3' TGACTGAATATTGACAAATGA 81556 AAA CAAA
                    TGAC TGA TGACAAATGA
                    ACTG ACT ACTGTTTACT
                      ___ TATA
GAM3604 YME1L1 3' GATAAATGTGACAAATG 81557 C ACAAA
                    GA AAATG TGACAAATG
                    CT TTTAC ACTGTTTAC
GAM3604 YME1L1 3' GATAAATGTGACAAATG 81557 C ACAAA
                    GA AAATG TGACAAATG
                    CT TTTAC ACTGTTTAC
GAM3604 YME1L1 3' GATAAATGTGACAAATG 81557 C ACAAA
                    GA AAATG TGACAAATG
                    CT TTTAC ACTGTTTAC
                     Α
GAM3604 LOC120406 3' TGACAAATGCTACAATATGGAT 81558
                                             __ _ ACAA
        GA
                     TGACAAATG ACAA ATG ATGA
                    ACTGTTTAC TGTT TAC TACT
                       GA A C_
GAM3604 LOC150311 5' TGACAAATGGTGAATCACAATG 81559
                                            ACA G A
                    TGACAAATG AAT ACAA TG
                    ACTGTTTAC TTA TGTT AC
                       CAC G _
GAM3604 LOC151473 3' TGACAATGGCATTTACAAATGA 81560 A A AATG
                    TGACAA TG CA ACAAATGA
```

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_ C AAA_
GAM3604 LOC163861 5' TGACAAATGACTGAATGCA 81561
                                             A_ A
                    TGACAAATGAC AATG CA
                    ACTGTTTACTG TTAC GT
                         AC _
GAM3604 LOC170063 3' AATGACAAACAAATG
                                  81562
                                         AAT
                    AATGACA GACAAATG
                    TTACTGT TTGTTTAC
GAM3604 LOC199907 3' TGACAAATGACAGAATTCAGGT 81563
                                                _ GA AA
        GA
                      TGACAAATGACA AAT CA TGA
                    ACTGTTTACTGT TTA GT ACT
                         C A CC
GAM3604 LOC220739 3' CACAGTCCAAGGTGACAAATGA 81564 AATGA A
                    CA CAA TGACAAATGA
                    GT GTT ACTGTTTACT
                     GTCAG CC
GAM3604 LOC256866 5' GACAAAGGCCAAATGACAGGTG 81565
                                              TGA
                                                    AA
                     GACAAA CAAATGACA TGA
                     CTGTTT GTTTACTGT ACT
                       CCG
                             CC
GAM3604 LOC51277 3' ACAAATGACAACACATGAATGA 81566
                                             ATGACA
                    ACAAATGACAA AATGA
                    TGTTTACTGTT
                                 TTACT
                         GTGTAC
GAM3605 EN2 5' CTCGGGCTCCGGCGCCGC 81569
                                         CA
                    CTCG CTCCGGCGCCGT
                    GAGC GAGGCCGCGGCG
                      CC
GAM3605 NR2F2 5' CTCGGGCTCCGGCGCGCG 81570
                                          CA
                                                C GTT
                    CTCG CTCCGGCGCGT CG
                     GAGC GAGGCCGCG CG GC
                      CC
                                            _{-} CCG
GAM3605 RAP1GA1 5' CTCGGCACTCTGGTGCCCGC 81571
                    CTCG CACTC GG GCC TGT
                    GAGC GTGAG CC CGG GCG
                      C AA _
GAM3605 SPINT2 5' CTCGCGTTCAGGTGCCGACGC 81572
                                           AC C C TGTT
                    CTCGC TC GG GCCG CGC
```

ACTGTT AC GT TGTTTACT

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GAGCG AG CC CGGC GCG
                      CATAT___
GAM3605 FLJ12876 5' CTCGCACTCTCGAGTTGTTCG 81573
                                            CGCCG
                    CTCGCACTC CGG TGTTCG
                    GAGCGTGAG GCT ACAAGC
                       A CA
GAM3605 FLJ20006 5' CTCACACTCTGGTGCCAGCGT 81574
                                            CC_
                    CTCGCACTC GG GCC GTGT
                    GAGTGTGAG CC CGG CGCA
                       AAT
GAM3605 HSMPP8 5' CTCGCGTTCCGCGCTCGGC 81575
                                          AC G T
                    CTCGC TCCG CGC CG GT
                    GAGCG AGGC GCG GC CG
                      CA A
GAM3605 HSP105B 5' CTCGCACACCGGCGCCGGC 81576 T T
                    CTCGCAC CCGGCGCCG GT
                    GAGCGTG GGCCGCGGC CG
                       Т
GAM3605 HUMAGCGB 5' CTCGGGCTCCGGCGCTGGCGCG 81577 CA
                                                TGTT
        AACACG
                        CTCCGGCGC
                                   CG CG
                     GAGGCCGCG
                               GC GC
                         ACCGIIIC TTGT
                    CC
GAM3605 KIAA1157 5' CTCGGCTCCGGCGTGCGC 81578
                                              CC
                                         CA
                    CTCG CTCCGGCG GTGT
                    GAGC GAGGCCGC CGCG
                          \mathsf{A}_{-}
GAM3605 KIAA1323 5' CTCCACTTCGGACAATGTTCGC 81579 G C C C
                    CTC CACT CGG GC GTGTTCGC
                    GAG GTGA GCC TG TACAAGCG
                     _ A _ T
GAM3605 KIAA1932 5' CTCGTGCATCGGCGTCTCCATG 81580
                                           CACTC
        C
                     CTCG CGGCG CCGTGT
                    GAGC GCCGC GGTACG
                      ACGTA AGA
GAM3605 P311
            3' CTCACACTCTGGTAGCATTCGC 81581
                                           C CGCC
                    CTCGCACTC GG GTGTTCGC
                    GAGTGTGAG CC CGTAAGCG
                       A AT__
GAM3605 RAB32 5' CTCGCGCTCTGCCGCCGC 81582
                                         A CG _
                    CTCGC CTC GC GCCGT
```

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GAGCG GAG CG CGGCG
                      C A_ G
GAM3605 TGOLN2 5' CTCGCCTTCGGCTGCTTCG 81583 A C CGTG
                    CTCGC CT CGGC GC TTCG
                    GAGCG GA GCCG CG AAGC
                      _ A A ___
GAM3605 LOC127294 3' CTCCACTTTGGTGCATCCG 81584
                                         G CC C CGT
                    CTC CACT GG GC GTTCG
                    GAG GTGA CC CG TAGGC
                     AA A
GAM3605 LOC146227 5' CTCGTACTCTCGGTGTCA 81585
                                         C _ CGCCG C
                    CTCG ACTC CGG TGTT G
                    GAGC TGAG GCC ACAG T
                     A A C
GAM3605 LOC255037 3' CTCCCACTCTGCGTGTTCG 81586 G CGGC C
                    CTC CACTC GC GTGTTCG
                    GAG GTGAG CG CACAAGC
                     G A_____
GAM3605 LOC255533 5' CTCTGCTCCGGCGTCCCGT 81587
                                          GCA
                    CTC CTCCGGCG CCGT
                    GAG GAGGCCGC GGCA
                     AC_
                           AG
GAM3605 LOC256310 5' CTCAGCATTCTGGCGCTCACTG 81588 _ C C _ _ TTC
        ATGC
                      CTC GCA TC GGCGC CG TG GC
                    GAG CGT AG CCGCG GT AC CG
                     T A A A G TA
                                           G CG C
GAM3605 LOC257478 5' CTCGCACTCCGCGCTGTTG 81589
                    CTCGCACTCCG CGC TGTT G
                    GAGCGTGAGGC GCG ACAA C
GAM3606 DAPP1 3' ACCGAGATCGGATCGTGCCTT 81592
                                          C C ATA
                    ACCGAGATC GG ATC CCTT
                    TGGCTCTAG CC TAG GGAA
                       _ _ CAC
GAM3606 TCF20 5' ACTGAGATCCAGCATTCACA 81593 C
                    AC GAGATCCGGCAT CATA
                    TG CTCTAGGTCGTA GTGT
```

Α

TT

GAM3606 KIAA1715 3' CACCAGATGCTAGCATCATGCC 81594 G CC_

Α

CACC AGAT GGCATCAT CCTT

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_ CGA
                             C
GAM3607 FACL4 3' TAAGTATTTTCTTCATAAATAT 81597 CT C
        TT
                     TAAG TTTTC TCATAAATATTT
                     ATTC AAAAG AGTATTTATAAA
                      AT A
GAM3607 FACL4 3' TAAGTATTTTCTTCATAAATAT 81597 CT C
        TT
                     TAAG TTTTC TCATAAATATTT
                     ATTC AAAAG AGTATTTATAAA
                      AT A
GAM3607 PCDHA11 5' TTCTTCCCCCAAATATTT 81598
                                           Α
                    TTTTTCCTC TAAATATTT
                     AAGAAGGGG GTTTATAAA
GAM3607 PCDHA11 5' TTCTTCCCCCAAATATTT 81598
                                           Α
                    TTTTTCCTC TAAATATTT
                    AAGAAGGGG GTTTATAAA
GAM3607 BCAA 3' TAAGCTTTTTTCTTCAACATTT 81599
                                           C CATA
                    TAAGCTTTTT CT AATATTT
                     ATTCGAAAAA GA TTGTAAA
                        A AG
GAM3607 QKI 3' TAAGTTTTTCTCTCATGGCACA 81600 C
                                             _ AA
        CTT
                      TAAG TTTTTC CTCAT ATATTT
                    ATTC AAAAAG GAGTA TGTGAA
                         A CCG
GAM3607 SEC24D 3' TAAGCTTTTTTTCTCAT 81601
                    TAAGCTTTTT CTCAT
                     ATTCGAAAAA GAGTA
                        AAA
GAM3608 OAS2 3' TGGTGGAGAGAACCAAGTATA 81604
                                          C TTA C
                     TGGT GGAGAG TAAG ATA
                     ACCA CCTCTC GTTC TAT
                         TTG A
GAM3608 CL25084 3' TGGTTGAGAGTCATTTTATACC 81605
                                           CG
                                                 AAGC
                    TGGT GAGAGTTAT ATACC
                     ACCA CTCTCAGTA TATGG
                          AAA_{-}
GAM3608 DORFIN 3' TGGCACTAGTGTTATAAGCATA 81606
                                            CGG A
                    TGGT AG GTTATAAGCATA
```

GTGG TCTA TCGTAGTA GGAA

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ACCG TC CAATATTCGTAT
                      TGA A
GAM3608 GLCCI1 5' TGGTTTGGGAGATGAAGCATAC 81607 C GTTAT
                    TGGT GGAGA AAGCATAC
                    ACCA CCTCT TTCGTATG
                      AAC AC
GAM3608 Spir-1 3' TGGTTAGTCATTTGTAAGCATA 81608
                                         CG AGAG A
        CC
                     TGGT G TT TAAGCATACC
                    ACCA C AA ATTCGTATGG
                      AT AGTA C
GAM3608 ZNF333 3' TGGTGGGAGAGTTTAACATACC 81609
                                               ATA
                    TGGT GGAGAGTT AGCATACC
                    ACCA CCTCTCAA TTGTATGG
                      С
                          Α
GAM3609 HNRPF 3' TAGTACTTGAAACTAAAGT 81612
                                          AGCAT
                    TAGTAT AAACTAAAGT
                    ATCATG TTTGATTTCA
                       AAC__
GAM3609 ITPR1 3' AGTATCTTTGAAACTAAAGT 81613
                                         AGCAT
                    AGTAT AAACTAAAGT
                    TCATA TTTGATTTCA
                      GAAAC
GAM3609 UTY
            3' CAGTATAGCATTTCAAAGTC 81614
                                           AAAC
                    TAGTATAGCAT TAAAGTC
                    GTCATATCGTA GTTTCAG
                         AA
GAM3609 DDM36 3' TAGTACAGCATAAACTAAA 81615
                    TAGTATAGCATAAACTAAA
                    ATCATGTCGTATTTGATTT
GAM3609 HRIHFB2072 3' ATATTCACACAGCTAAAGTC 81616
                                           A AA
                    GTAT GCATA CTAAAGTC
                    TATA TGTGT GATTTCAG
                      AG C_
GAM3609 KIAA1712 3' GTATAGTAACCAAAGTC 81617
                                         CATA
                    GTATAG AACTAAAGTC
                    CATATC TTGGTTTCAG
GAM3609 NAV3 3' GCTTAGAAATAAACTAAAGT 81618 A C_
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GT TAG ATAAACTAAAGT

11 111 111111111111

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CG ATC TATTTGATTTCA
                      A TT
                                               T _ A
GAM3609 PCDH20 3' TAGTATAGCAGAATACTACAG 81619
                     TAGTATAGCA AA ACTA AG
                     ATCATATCGT TT TGAT TC
                          CAG
GAM3609 SGKL 3' CAGTATAGATATTAAAGTC 81620
                                            C AAC
                     TAGTATAG ATA TAAAGTC
                      GTCATATC TAT ATTTCAG
                         Α
GAM3609 LOC254043 3' ATATAGCACCTAGAGT
                                    81621
                                             AAA A
                      GTATAGCAT CTA AGT
                      TATATCGTG GAT TCA
                          С
GAM3609 LOC254820 3' TAGCATAGTAATTTTAAAGTC 81622
                                               CATAAAC
                     TAGTATAG
                                TAAAGTC
                      ATCGTATC
                                ATTTCAG
                         ATTAAA
             3' TATTATATTTAACGTCTTATAT 81625
GAM3610 FUT9
                                              T TA
                      TATTATATTT A TTTTATATTT
         TT
                      ATAATATAAA T AGAATATAAA
                          T GC
GAM3611 FLJ20730 3' TAATAAAATAAAATGCC 81628
                                            Α
                     TAATAAGA TAAAATGCT
                      ATTATTTT ATTTTACGG
GAM3611 KIAA0342 3' TAATGAGAATAAAAAGCAATG 81629
                                                  TT
                      TAAT AGAATAAAA GC AATG
                      ATTA TCTTATTTT CG TTAC
                       С
                            Т
GAM3611 KIAA0472 3' TAATAAGAATGGATGCC
                                    81630
                                             AAA
                      TAATAAGAAT ATGCT
                      ATTATTCTTA TACGG
                          CC_{-}
GAM3611 LOC147353 3' ATAAGAATAAAACTGTGTC 81631
                                                GCTAA
                     ATAAGAATAAAAT TGTC
                      IIII
                      TATTCTTATTTTG ACAG
                           AC_{-}
GAM3612 ADAM11 3' CCAGAGAGATAAGAC
                                   81634
                                             AAA
```

TCAGAGAGATA AGAT

GGTCTCTCTAT TCTG

GAM3612 ADAM11 3' CCAGAGAGATAAGAC AAA 81634 TCAGAGAGATA AGAT GGTCTCTCTAT TCTG GAM3612 AKT1 3' CCAGAGAGATGACAG 81635 **AAAAA** TCAGAGAGAT GATAG GGTCTCTCTA CTGTC GAM3612 ATP1A1 5' TCAGAGAGAAAAGCACAGA 81636 TAA _ TCAGAGAGA AAAG ATAGA AGTCTCTCT TTTC TGTCT G GAM3612 BACH2 3' TCAGAAGATAAATAGCAG 81637 G A A TCAGA AGATAAA AG TAG AGTCT TCTATTT TC GTC Α_ GAM3612 CA12 3' TCAGAGAGAGAGAAGTAGA 81638 TAAA A TCAGAGAGA AAG TAGA AGTCTCTCT TTC ATCT CTC_ _ GAM3612 CBFA2T3 3' CAGAGAGGAAAAGAGAG 81639 ATA T CAGAGAG AAAAGA AG GTCTCTC TTTTCTTC C__ C TAA A GAM3612 DCTN1 5' CAGAGAGAAAAGGTAGA 81640 CAGAGAGA AAAG TAGA GTCTCTCT TTTC ATCT ___ C GAM3612 DDX11 3' TCAGAAAGAAAAGGTAG 81641 TA A TCAGAGAGA AAAAG TAG AGTCTTTCT TTTTC ATC С GAM3612 DEC1 3' CCAGAGAGATAACACACATAG 81642 AAAG_ TCAGAGAGATAA ATAG GGTCTCTCTATT TATC GTGTG GAM3612 EIF2C1 3' AGAGGGATAAAAAGTTTAGA 81643 $\mathsf{A}_{_}$

AGAG GATAAAAAG TAGA

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TCTC CTATTTTTC ATCT
                      C
                          AA
GAM3612 FOXP2 5' AAAGAGATGAAAAATTAG 81644
                                         A A
                    AGAGAGAT AAAAG TAG
                    TTTCTCTA TTTTT ATC
                        C A
GAM3612 GATA2 3' TCAGAGAGGGAAGCCAGA 81645
                                           ATAAA A
                    TCAGAGAG AAG TAGA
                    AGTCTCTC TTC GTCT
                       CC G
GAM3612 GPR85 5' AAGAACAAGGAAAAGATAGA 81646
                                          ATA
                    GAGAG AAAAGATAGA
                    TTCTT TTTTCTATCT
                      GTTCC
GAM3612 HSPA5 3' AGAAAGATAAGGGGAAATAG 81647
                                             AA
                    AGAGAGATAA AGATAG
                    TCTTTCTATT TTTATC
                        CCCC
GAM3612 IL7R 5' AGAGAGATAGAGAGAGA 81648
                                         AAA T
                    AGAGAGATA AGA AGA
                    TCTCTCTAT TCT TCT
                        C C
                                           ATAAA A
GAM3612 LSP1
            3' TCAGAGAGTGGAAGGGCAGA 81649
                    TCAGAGAG AAG TAGA
                    AGTCTCTC TTC GTCT
                        ACC__ CC
GAM3612 MS4A3 3' TCAGAGAGATTAGATA
                                 81650
                                          AAAA
                    TCAGAGAGAT AGATA
                    AGTCTCTCTA TCTAT
                        Α___
GAM3612 PIP5K1A 3' TCAGAGAGAAAGAACTAAGGTA 81651
                                             TAAA___ A
        G
                     TCAGAGAGA
                                AAG TAG
                     AGTCTCTCT
                               TTC ATC
                        TTCTTGA C
            3' TCAAGAGAAAGTAAAGATAGA 81652
GAM3612 PKD2
                                             TAA
                    TCA GAGAGA AAAGATAGA
                    AGT CTCTTT TTTCTATCT
                     Т
                         CA_{-}
GAM3612 SLC16A2 3' TCAGAGAGAGAAAAAAA 81653
                                           AT_{-}
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TCAGAGAG AAAAAGA

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AGTCTCTC TTTTTCT
                        CTC
GAM3612 USH2A 3' CCAGAATTCTAAAAAGATGGA 81654
                                            AGA
                                                  Α
                    TCAGAG TAAAAAGAT GA
                     GGTCTT ATTTTTCTA CT
                       AAG
                             С
GAM3612 WNT5A 3' CAGAGAGATAACCCCAGA 81655
                                            AAAGA
                     CAGAGAGATAA TAGA
                     GTCTCTCTATT GTCT
                         GGG
GAM3612 APOL6 3' CAGAGAGATAACTTTGAATAGA 81656
                                              AAA
                     CAGAGAGATAA GATAGA
                     GTCTCTCTATT TTATCT
                         GAAAC
GAM3612 C20orf36 3' CCAGAATTATAAAAGATAGA 81657
                                           AG
                                               Α
                    TCAGAG ATAAAA GATAGA
                     GGTCTT TATTTT CTATCT
                       AA
GAM3612 CIP29
            3' TCAAGAAAGAAGATAG
                                          TAAAA
                                 81658
                     TCA GAGAGA AGATAG
                     AGT CTTTCT
                               TCTATC
GAM3612 CYB5-M 3' TCACGGAGATAAAATACAGA 81659
                                          GA
                                                AG
                    TCA GAGATAAAA ATAGA
                     AGT CTCTATTTT TGTCT
```

GC

GAM3612 CYB5-M 3' TCACGGAGATAAAATACAGA 81659 GA AG TCA GAGATAAAA ATAGA AGT CTCTATTTT TGTCT

> GC $\mathsf{A}_{_}$

GAM3612 DIO2 3' CCAGGGAGACAAAGAT 81660 Α AΑ TCAG GAGATAA AGAT

GGTC CTCTGTT TCTA

GAM3612 DIO2 3' CCAGGGAGACAAAGAT 81660 Α AATCAG GAGATAA AGAT GGTC CTCTGTT TCTA

С

GAM3612 FLJ11275 3' AGACATGATGAAAAGATAGA 81661 GA_ A AGA GAT AAAAGATAGA

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TCT CTA TTTTCTATCT
                      GTA C
GAM3612 FLJ11730 3' TCAGAAAGATTTAAGATAG 81662
                                             AAA
                     TCAGAGAGAT AAGATAG
                     AGTCTTTCTA TTCTATC
                         AA
GAM3612 FLJ13111 3' TCAGAGAAGGGTAAAGATGGA 81663
                                              ATAA A
                     TCAGAGAG AAAGAT GA
                     AGTCTCTT TTTCTA CT
                        CCCA
GAM3612 FLJ13187 3' CCAGAAAGTAAGAAGGTAG 81664
                                             A A A
                     TCAGAGAG TAA AAG TAG
                     GGTCTTTC ATT TTC ATC
                        СС
GAM3612 FLJ14753 3' TCAGAGAAACAGGAAGGTAGA 81665
                                               AA A
                     TCAGAGAGATA AAG TAGA
                     AGTCTCTTTGT TTC ATCT
                         CC C
GAM3612 FLJ20436 3' TCAGAGGATAAAAAGCCAGA 81666
                                                 Α
                     TCAGAG GATAAAAG TAGA
                     AGTCTC CTATTTTTC GTCT
GAM3612 FLJ23604 3' TCAGAGAGAAAAGTGCAGA 81667
                                             TAA A
                     TCAGAGAGA AAAG TAGA
                     AGTCTCTCT TTTC GTCT
                            AC
GAM3612 FLJ33069 3' TCAGAGAGTATCACATAGA 81668
                                             AAAAAG
                     TCAGAGAG AT ATAGA
                     AGTCTCTC TA
                                 TATCT
                        A GTG
GAM3612 H3FJ
            3' AAGAAACCCAAGATAGA
                                         AAA
                                  81669
                     GAGAGAT AAGATAGA
                     TTCTTTG TTCTATCT
                        GG
GAM3612 HIC
            3' AGAGAGATCAAACTGAGTAG 81670
                                           _ AA _
                     AGAGAGAT AAA GA TAG
                     TCTCTCTA TTT CT ATC
                        G GA C
                                         _ TAAA
GAM3612 KCNMB2 3' AGATGAGAAAGATAGA
                                   81671
```

AGA GAGA AAGATAGA

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TCT CTCT TTCTATCT
                      Α
GAM3612 KIAA0446 3' TCAAAGAGATCAAGAT 81672
                                          AAA
                    TCAGAGAGAT AAGAT
                    AGTTTCTCTA TTCTA
                        G
GAM3612 KIAA0876 3' GAGAGAAACAAAGATAGA 81673
                                          TAA
                    GAGAGA AAAGATAGA
                    CTCTCT TTTCTATCT
                       TTG
GAM3612 KIAA1052 3' GAGAGGGTCAAAAAGAGAGA 81674
                                                Т
                    GAGAG TAAAAAGA AGA
                    CTCTC GTTTTTCT TCT
                      CCA
                            C
GAM3612 KIAA1443 3' GAGGATTTTGGAAAGATAGA 81675 A AA
                    GAG GAT AAAGATAGA
                    CTC CTA TTTCTATCT
                     _ AAACC
GAM3612 KIAA1514 3' CAGAGAGAGAAGATAG 81676
                                          TAAA
                    CAGAGAGA AAGATAG
                    GTCTCTCT TTCTATC
GAM3612 KIAA1817 3' AGAGAGACAAATCCACAG 81677
                                            AAG
                    AGAGAGATAAA ATAG
                    TCTCTCTGTTT TGTC
                         AGG
GAM3612 MGC2306 3' TCAGAGAGGGAAGCCAGA 81645
                                          ATAAA A
                    TCAGAGAG AAG TAGA
                    AGTCTCTC TTC GTCT
                        CC___ G
GAM3612 MGC25056 5' TCAGAGAAGGGCCCCAAAAGGT 81678
                                             ATA A
        AG
                      TCAGAGAG AAAAG TAG
                    AGTCTCTT TTTTC ATC
                        CCCGGGG C
GAM3612 MUF1 3' CAGAAAGAGAAAGATAGA 81679
                                          TAA
                    CAGAGAGA AAAGATAGA
                    GTCTTTCT TTTCTATCT
                       \mathsf{C}_{-}
GAM3612 NUDC
             3' TCAGGGAGGAAAAAACAG 81680
                                         A ATA
                    TCAG GAG AAAAGATAG
```

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AGTC CTC TTTTTTGTC
                      C C_
GAM3612 PCDH10 3' GAGAGAGAAAGATAGA 81681
                                         TAA
                    GAGAGA AAAGATAGA
                    CTCTCT TTTCTATCT
                       С
GAM3612 PRO1600 5' TCAGAGAAATCTCAAGAGATAG 81682
                                              AA_ _
                    TCAGAGAGAT AA AGATAG
                    AGTCTCTTTA TT TCTATC
                        GAG C
GAM3612 RDH-E2 3' CCAGAGAGGATAGCAAGGGGGT 81683
                                              _ AA A___
        AGA
                      TCAGAGAG ATA AAG TAGA
                    GGTCTCTC TAT TTC ATCT
                        C CG CCCC
GAM3612 U5-100K 3' TCAGAGAATAGAAAACAGA 81684
                                           ATAAA
                    TCAGAGAG AAGATAGA
                    AGTCTCTT TTTTGTCT
                        ATC__
GAM3612 UBXD2 3' TCAGAGACATAGGACCTCAATA 81685
                                            G AAAA
        GA
                      TCAGAGA ATA
                                  GATAGA
                     AGTCTCT TAT TTATCT
                       G CCTGGAG
GAM3612 ZNF294 3' TCAGAAAGAGACATAGAAAGAT 81686
                                               Α___
                      TCAGA GAGATA AAAGATAGA
        AGA
                    AGTCT CTCTGT TTTCTATCT
                          ATC
                      TT
GAM3612 LOC130026 3' AGGAGATGGGAAGATAGA 81687 A AAA
                    AG GAGAT AAGATAGA
                    TC CTCTA TTCTATCT
                     _ CCC
GAM3612 LOC144289 5' AGAGAAACTAAGAGATAG 81688
                                            A
                    AGAGAGAT AA AGATAG
                     TCTCTTTG TT TCTATC
                        A C
GAM3612 LOC145082 5' TCAGCAGAAGAAGATAGA 81689
                                          AG TAAA
                    TCAG AGA AAGATAGA
                     AGTC TCT TTCTATCT
                      G_ TC__
GAM3612 LOC146909 3' TCAAAAAAAAAAAAAAA 81690
                                           Т
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TCAGAGAGA AAAAAGAT

AGTTTTTTT TTTTTCTA

GAM3612 LOC148930 3' CAGAGGACAGCAGAAGATAGA 81691 A AA__ CAGAG GATA AAGATAGA GTCTC CTGT TTCTATCT _ CGTC GAM3612 LOC149386 5' TCAGAGAATGGATATGAATAG 81692 AAAA TCAGAGA GATA GATAG AGTCTCT CTAT TTATC TAC AC GAM3612 LOC151438 3' CCAGAGAGGAAAAGGGAG 81693 ATA AT TCAGAGAG AAAAG AG GGTCTCTC TTTTC TC C CC GAM3612 LOC152317 3' GAGAGATAAAGAGATGGA 81694 GAGAGATAAA AGAT GA CTCTCTATTT TCTA CT C C GAM3612 LOC152453 5' CCAGAGAGAAGATAG TAAAA 81695 TCAGAGAGA AGATAG GGTCTCTCT TCTATC GAM3612 LOC200010 3' GAGAATAGAAAGATAGA 81696 AGAGAG TA AAAGATAGA CTCTT AT TTTCTATCT С GAM3612 LOC221301 3' TCAGAGAGAAAAAAAAA 81697 Т TCAGAGAGA AAAAAGA AGTCTCTCT TTTTTCT TTC GAM3612 LOC254439 3' CCAGAGAGCTGTGAAGAGGTAG 81698 ATAAA __ TCAGAGAG AAGA TAG GGTCTCTC TTCT ATC GACAC CC GAM3612 LOC255835 3' AAGAAACCCAAGATAGA 81669 AAA GAGAGAT AAGATAGA TTCTTTG TTCTATCT GG_{-} GAM3612 LOC51326 3' TCAGGGAGACAAAATAGA 81699 AAA TCAG GAGATAA GATAGA

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AGTC CTCTGTT TTATCT
                      С
GAM3612 LOC90520 3' TCAGAGAGAGAAAAGAT 81700
                                            TΑ
                     TCAGAGAGA AAAAGAT
                     AGTCTCTCT TTTTCTA
                        С
GAM3612 LOC92539 5' GAACAAGATAGAAGATAGA 81701 __ A
                     GA GAGATA AAAGATAGA
                     CT TTCTAT TTTCTATCT
                     TG
                         С
GAM3613 DPYD 3' GGGATTTTACTTAATAAA 81704
                                           TAT
                     GGGGTTTTACTT GTGAA
                     CCCTAAAATGAA TATTT
                         Т
                                            AC A
GAM3613 GABPB1 3' AAGGGGTTTTGTTTTGT 81705
                     AAGGGGTTTT TTT TGT
                     TTCCCCAAAA AAA ACA
                         C_ A
GAM3613 PDGFB 3' AAGGAGTCTTTGTGTGAAT 81706
                                           TTTA A
                     AAGGGT CTTT TGTGAAT
                     TTCCTCA GAAA ACACTTA
GAM3613 PTPRCAP 3' AAGGAGTTTTATTTCAAATG 81707
                                              C T
                     AAGGGGTTTTA TTTA GTG
                     TTCCTCAAAAT AAGT TAC
                         A T
GAM3613 TCF8 3' AAGGGGTTTTGTGTTGGAATC 81708
                                            ACTTTA T
                     AAGGGGTTTT TG GAATT
                     TTCCCCAAAA
                               AC CTTAG
                         CACA__ _
GAM3613 FLJ31890 3' AAGGTGTACCTCTTGTGTGAAT 81709
                                            TT A
                     GGGGT TACTTT TGTGAATT
        Т
                     TTCCA ATGGAG ACACTTAA
                       C_
                          AAC
GAM3613 FYCO1 3' GGGTTTTGCTCTTGGA 81710
                                         AAT
                     GGGTTTT CTTT TG GA
                     CCCAAAA GAGA AC CT
                       C _ _
GAM3613 KIAA0237 3' AAGGGGTTCTTGCCTTCTGTGA 81711
                     AAGGGGTTTT CTTT TGTGA
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TTCCCCAAGA GGAA ACACT
                         AC G
GAM3613 KIAA0453 3' AGGAGAGCACTTTTATGTG 81712
                                            TTT
                     AGGGG TACTTT ATGTG
                     TCCTC GTGAAA TACAC
                       TC A
GAM3613 KIAA0563 5' GGGTTTTATTTAAATTGAATT 81713
                                             C TG
                     GGGTTTTA TTTA TGAATT
                     CCCAAAAT AAAT ACTTAA
                        TTA
GAM3613 NUP54 5' AAGGGATTTTCTTGTGTGAATT 81714
                                              A TA
                     AAGGGGTTTT CTT TGTGAATT
                     TTCCCTAAAA GAA ACACTTAA
                         С
GAM3613 STAF42 3' AGGGGCTTTATTTTGT
                                  81715
                                           CA
                     AGGGGTTTTA TTT TGT
                     TCCCCGAAAT AAA ACA
GAM3613 LOC147071 5' GGGTTTTATTTAAATTGAATT 81713
                                              C TG
                     GGGTTTTA TTTA TGAATT
                     CCCAAAAT AAAT ACTTAA
                        _ TTA
GAM3613 LOC148388 3' AAAGGGTTTTTCCTCTGTGTGA 81716
                                                A_ A
                     AAGGGGTTTT CTTT TGTGA
                     TTTCCCAAAA GAGA ACACT
                         AG C
GAM3613 LOC149194 3' GGGTTTTACTGGTGAATT 81717
                                              TTAT
                     GGGTTTTACT GTGAATT
                     CCCAAAATGA CACTTAA
                         C___
GAM3613 LOC149830 3' GGGTTTTACTTAGAAT
                                             TATGT
                                   81718
                     GGGTTTTACTT
                                  GAAT
                     CCCAAAATGAA CTTA
                         \mathsf{T}_{\_}
                                   81719
GAM3613 LOC166034 5' AAGGGATTTTACATGA
                                             TTTAT
                     AAGGGGTTTTAC
                                   GTGA
                     TTCCCTAAAATG
                                   TACT
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GAM3613 LOC201173 5' GGGTTTTATTTAAATTGAATT 81713

GGGTTTTA TTTA TGAATT

C TG_

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CCCAAAAT AAAT ACTTAA
                         _ TTA
GAM3613 LOC201220 5' GGGTTTTATTTAAATTGAATT 81713
                                             C TG
                     GGGTTTTA TTTA TGAATT
                     CCCAAAAT AAAT ACTTAA
                        _{-} TTA
GAM3613 LOC221431 3' AAGGGGTTTTTAACTGAAT 81720
                                              ACTT TG
                     AAGGGGTTTT TA TGAAT
                     TTCCCCAAAA AT ACTTA
                         TG
GAM3613 LOC57086 3' AAGGGTTTTGCTTTGT 81721
                                             А А
                     AGGGGTTTT CTTT TGT
                     TTCCCAAAA GAAA ACA
                         C GA
GAM3613 LOC90092 5' AGGGTTTCAGCATGTG 81722
                                            CTT
                     GGGGTTTTA TATGTG
                     TCCCAAAGT GTACAC
                         C__
GAM3613 LOC93166 3' AAGGGCTTTTCTCCAGTGTG 81723
                                               Α
                     AGGGGTTTT CTTTA TGTG
                     TTCCCGAAA GAGGT ACAC
GAM3614 CD9
            3' CATTGCAGGATTTCTGCT 81726
                                          Т
                     TATTGC ATTTCTGCT
                     GTAACG TAAAGACGA
                        TCC
GAM3614 DYRK1A 3' ATATTGCTATACTCA
                                  81727
                                           TTCT
                     ATATTGCTAT GCTCA
                     TATAACGATA TGAGT
GAM3614 DYRK1A 3' ATATTGCTATACTCA
                                           TTCT
                                  81727
                     ATATTGCTAT GCTCA
                     1111111111 11111
                     TATAACGATA TGAGT
GAM3614 DYRK1A 3' ATATTGCTATACTCA
                                  81727
                                           TTCT
                     ATATTGCTAT GCTCA
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GAM3614 MS4A7 3' TCTGTGTATCACCTTCTGCTCA 81728 GCA_ TG AT TC TAT CT TTCTGCTCA

TATAACGATA TGAGT

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ACAC GT __
GAM3614 AF038169 5' GCTCCCTATTTCTGCT
                                   81729 ATA G
                     GC TT CTATTTCTGCT
                     CG AG GATAAAGACGA
                      ___ G
GAM3614 BBX
             3' CATTCTGTTTCTGCTCA
                                 81730
                                         G A
                     TATT CT TTTCTGCTCA
                     GTAA GA AAAGACGAGT
                       С
GAM3614 C21orf42 3' GCATGTGTTCTGCTCA 81731
                                         AT CTAT
                     GCAT TG TTCTGCTCA
                     CGTA AC AAGACGAGT
                                          G TT
GAM3614 CCNG2 3' GCATACTTCCAATCTGCT 81732
                     GCATATT CTA TCTGCT
                     CGTATGA GGT AGACGA
                        A T_
GAM3614 FLJ22037 5' GCATTGATTTCTGCT
                                         AT CT
                                  81733
                     GCAT TG ATTTCTGCT
                      1111 11 111111111
                      CGTA AC TAAAGACGA
GAM3614 KIAA1024 3' TCTTATGTTGCTATTTCC 81734
                                          GC A
                     TC AT TTGCTATTTCT
                     AG TA AACGATAAAGG
                      AA C
GAM3614 KIAA1239 3' TCACATATTTCTGCT
                                  81735
                                           GCTATT
                     TCGCATATT
                                TCTGCT
                     AGTGTATAA
                                 AGACGA
GAM3614 LCHN
             3' TCGTATTGCTATAACTC 81736
                                         CA
                                              TTCT
                     TCG TATTGCTAT GCTC
                      AGC ATAACGATA TGAG
                            T__
GAM3614 MGC10067 3' GCATATTGCTATCATCTTCAA 81737
                                                 _ GC
                     GCATATTGCTATT TCT TCAA
                     CGTATAACGATAG AGA AGTT
                           Τ
GAM3614 LOC145609 5' GCATTTATTTCTGCTCA 81738
                                           ATTGC
                     GCAT TATTTCTGCTCA
```

AG ATA GG AAGACGAGT

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CGTA ATAAAGACGAGT
                      Α
GAM3614 LOC254719 5' TCGTATTGCTATAACTC 81736 CA TTCT
                     TCG TATTGCTAT GCTC
                     AGC ATAACGATA TGAG
                           Т
GAM3615 PREB 3' CATAGCCAAGCCTTTTCACTA 81741
                                            TAA A C
                     TATAGCCAA TT TTC ACTA
                     GTATCGGTT GA AAG TGAT
                        CG A
GAM3615 SACS
             3' TAAGCCGATAATTATAAACTA 81742 T A
                                               TCC
                     A AGCC ATAATTAT ACTA
                     A TCGG TATTAATA TGAT
                     T C
                           TT
GAM3615 TEM7R 3' TATAGATGACATTCCACTA 81743
                                          CCAATAAT
                     TATAG TATTCCACTA
                     |||||||||
                     ATATC GTAAGGTGAT
                      TACT
GAM3615 KIAA0332 3' TAGCCAGGCATTCCACTAA 81744
                                           ATAAT
                     TAGCCA TATTCCACTAA
                     ATCGGT GTAAGGTGATT
                       CC
GAM3615 KIAA0355 3' AGCCAATAGTTATTTTACT 81745
                                           A CC
                     AGCCAATA TTATT ACT
                     TCGGTTAT AATAA TGA
                        C AA
GAM3615 LOC254423 3' TAGCCAATGATGTCCCT 81746
                                           A TAT A
                     TAGCCAAT AT TCC CT
                     ATCGGTTA TA AGG GA
                        C C__ _
GAM3616 CSNK1G3 3' GTCCTTGAAAATATACGTG 81749
                                           C_{-}
                     GTTC GAAAATATACGTG
                     CAGG CTTTTATATGCAC
                      AA
GAM3616 FUT6 5' ATCCCGTCTGGATGCCCGTGA 81750
                                            CC AAATATA
                     ATCCCGTT GA
                                  CGTGA
                     TAGGGCAG CT
                                  GCACT
                        AC ACGG_
GAM3616 HTR2B 5' ATCCCGTTCCGAACAGTG 81751
                                             AATATAC
                     ATCCCGTTCCGAA
                                    GTG
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TAGGGCAAGGCTT
                                     CAC
                          GT
GAM3616 AMOTL1 3' ATCCTGTTTAGAAAATAC 81752
                                          C CC
                     ATCC GTT GAAAATAT
                     TAGG CAA CTTTTATG
                       A AT
GAM3616 C20orf130 3' GTCCTGAAGGACACGTGA 81753
                                           C AAT
                     GTTC GAA ATACGTGA
                     CAGG CTT TGTGCACT
                       A CC
GAM3616 LOC254122 3' ATCCTTTTCTTGACGTATACGT 81754
                                             CG C_ AAA
         G
                      ATCC TTC GA TATACGTG
                     TAGG AAG CT ATATGCAC
                       AA AA GC
GAM3617 C7orf2 3' TGAATAAGCTTCACTTAGTA 81757 T
                                              G
                     TG ATAAGCTTTA TAGTA
                     AC TATTCGAAGT ATCAT
                      Т
                           GA
GAM3617 CLASP1 5' TGTAGAAGCTCTAGATGT 81758
                                               TΑ
                                          Т
                     TGTA AAGCTTTAG GT
                     ACAT TTCGAGATC CA
                           TA
GAM3617 FHL1
             3' TGTTAAGCTTCCAGAAGTA 81759
                                             _ T
                     TGT TAAGCTTT AG AGTA
                     ACA ATTCGAAG TC TCAT
                          GТ
GAM3617 GNG5
             3' TGTACAGGCTTCAAATGTA 81760
                                               TΑ
                     TGTATA GCTTTAG GTA
                     ACATGT CGAAGTT CAT
                       C
                           TΑ
GAM3617 ICA1
            3' TAAGCTCTTTAAAGTAGTA 81761
                     TAAGCTTT AGTAGTA
                     ATTCGAGA TCATCAT
                        AATT
GAM3617 LBR
            3' TGCATAAGCTTAACAGTA 81762
                                           TAG
                     TGTATAAGCTT TAGTA
                     ACGTATTCGAA GTCAT
                         TT_{-}
GAM3617 PCDH7 3' TGCATAGACACCAGTAGTA 81763
                                            AG T
                     TGTATA C TTAGTAGTA
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ACGTAT G GGTCATCAT
                        CT T
GAM3617 PCDHB9 3' TGTATTAGCTTTAAAGTA 81764
                                                Т
                                           Α
                     TGTAT AGCTTTAG AGTA
                      ACATA TCGAAATT TCAT
GAM3617 FLJ10241 3' TGTAAAGTGTCAGTAGTA 81765
                                           T CT
                     TGTA AAG TTAGTAGTA
                      ACAT TTC AGTCATCAT
                       AC
GAM3617 FLJ12085 3' TGTAAAGCTTTAATGTA
                                   81766
                                          Т
                                               Α
                     TGTA AAGCTTTAGT GTA
                      ACAT TTCGAAATTA CAT
GAM3617 FLJ20625 3' TGTATAAGCCGCAGT
                                   81767
                                            TTA
                     TGTATAAGCT GTAGT
                      ACATATTCGG CGTCA
GAM3617 FLJ22794 3' TGTATGGCTTTAGTAGTA 81768
                                            AA
                     TGTAT GCTTTAGTAGTA
                      ACATA CGAAATCATCAT
                        С
GAM3617 HERC3
             3' TGTATAGGCCTCAATGT 81769
                                           Α
                     TGTATA GCTTTAGT GT
                      ACATAT CGGAGTTA CA
                        С
GAM3617 KIAA1165 3' TGTACCTTTTAGTAGTA
                                           AAGC
                                   81770
                     TGTAT TTTAGTAGTA
                      ACATG AAATCATCAT
                        GA__
GAM3617 MEF-2 3' TGTATAAGCATGCAATA
                                   81771
                                            TTTA
                      TGTATAAGC GTAGTA
                      111111111 1111111
                      ACATATTCG CGTTAT
                         TA
GAM3617 OSRF
             3' TATAAGCTCCAACAGTAGTA 81772
                     TATAAGCTT TAGTAGTA
                      ATATTCGAG GTCATCAT
                         GTT
GAM3617 RAP140 3' TGTAAAAGCTTAGTAGTA 81773
                                             Т
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TGTA AAGCTT AGTAGTA

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ACAT TTCGAA TCATCAT
GAM3617 TRIM2 3' TGTATATTTAGTAGT
                                81774
                                        AGC
                     TGTATA TTTAGTAGT
                     ACATAT AAATCATCA
GAM3617 LOC113763 3' TGTACAAAGCCACGTAGTA 81775
                                             TTA
                     TGTATAA GCT GTAGTA
                     ACATGTT CGG CATCAT
                        T TG
GAM3617 LOC133418 3' TGTATGAGCCTCAATGGT 81776
                     TGTAT AGCTTTAGT GT
                     ACATA TCGGAGTTA CA
GAM3617 LOC145652 3' TGTATAAGCATGCAATA 81771
                                            TTTA
                     TGTATAAGC GTAGTA
                     ACATATTCG CGTTAT
                         TA__
GAM3617 LOC152580 5' TGTGAGCTCCAGCAGTA 81777
                                           ATA
                     TGT AGCTTTAGTAGTA
                     ACA TCGAGGTCGTCAT
GAM3617 LOC168346 5' TGTACAAGCTCCCTCAGT 81778
                                              AG
                     TGTATAAGCTTT TAGT
                     ACATGTTCGAGG GTCA
                          GA
GAM3617 LOC200558 3' TGTAAAGAGTCAGTAGTA 81779
                                           T CT
                     TGTA AAG TTAGTAGTA
                     ACAT TTC AGTCATCAT
                      _ TC
GAM3617 LOC254978 3' TGTTAAGCTTTATCAGTA 81780
                                               G
                     TGT TAAGCTTTA TAGTA
                     ACA ATTCGAAAT GTCAT
                           Α
GAM3617 LOC256642 3' TGTAATGCTGTAGTAGTA 81781
                                           TAA T
                     TGTA GCT TAGTAGTA
                     ACAT CGA ATCATCAT
                      TA_ C
```

GAM3617 LOC81558 3' TGTGTAAGCTCTGCAGTA 81782

TGT TAAGCTTT GTAGTA

Α

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ACA ATTCGAGA CGTCAT
                      C
GAM3617 LOC89919 3' TGTAGAAGCAACAATAGTA 81783
                                           T TT
                     TGTA AAGC TAGTAGTA
                     ACAT TTCG GTTATCAT
                       C TT
GAM3617 LOC91137 3' GTATGGGCTTTAGTACCA 81784
                                           AA
                                                G
                     GTAT GCTTTAGTA TA
                     CATA CGAAATCAT GT
                      CC
                            G
GAM3618 MFAP3 3' TCAGTTAGGCAATCCCTG 81787
                     TCAGTTAG CGATC TTG
                     AGTCAATC GTTAG GAC
                        C G
GAM3618 MYO1D 3' CCAGTTAGATGGTTCCACTA 81788
                                             CGA
                     TCAGTTAGA TCATTG
                     GGTCAATCT GGTGAT
                        ACCAA
GAM3618 RCN1
             3' TCTAATCAGTGATCATTGAGG 81789
                                             AC
                     TC AGTTAG GATCATTGAGG
                     AG TTAGTC CTAGTAACTCC
                         Α
GAM3618 TDG
            3' TCAGTTAGCAAACTGAGG 81790
                                           A TC
                     TCAGTTAG CGA ATTGAGG
                     AGTCAATC GTT TGACTCC
GAM3618 VAT1
            3' TCATTTAGACAATGAG
                                            TCAT
                                 81791 G
                     TCA TTAGACGA TGAG
                     AGT AATCTGTT ACTC
                      Α
GAM3618 CABYR 3' TCAGTTAGACAATAAAGG 81792
                                              CATT
                     TCAGTTAGACGAT GAGG
                     AGTCAATCTGTTA TTCC
                          \mathsf{T}_{\_}
GAM3618 DKFZP434P0721 3' TCAGTTAGGAGACAAAGG 81793
                                                 AC CATT
                     TCAGTTAG GAT GAGG
                     AGTCAATC CTG TTCC
                        CT T__
GAM3618 DKFZp566D2343' TCAATTGGTAGTTCATTGAGG 81794
                                                AGACGA
```

TCAGTT TCATTGAGG

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CCATCA
GAM3618 FLJ10297 3' CCAGTTAGGTGGATCCTGGG 81795
                                           AC A A
                    TCAGTTAG GATC TTG GG
                    GGTCAATC CTAG GAC CC
                       CAC _ _
GAM3618 MGC21738 3' TCAGTTAATGTCAGGGAGG 81796
                                          ACGA TT
                    TCAGTTAG TCA GAGG
                    AGTCAATT AGT CTCC
                       AC CC
GAM3618 PRO2133 3' TCAGTTAATGGTTTTTACTGAG 81797
                                           ACGATC
        G
                    TCAGTTAG
                              ATTGAGG
                    ||||||
                    AGTCAATT
                             TGACTCC
                       ACCAAAAA
GAM3618 LOC150157 3' CCAGTAGTCATTGAG
                                 81798
                                      T ACGA
                    TCAGT AG TCATTGAG
                    GGTCA TC AGTAACTC
GAM3618 LOC91464 5' CCAGTTAGATGATCCAAACAGG 81799
                                             C ATTG
                    TCAGTTAGA GATC AGG
                    GGTCAATCT CTAG TCC
                       A GTTTG
GAM3619 CCND1 3' GGCACCGCCCCTTCCCCTCG 81802
                                            G GCG
                    GGCACCGCCC CCC CTCG
                    CCGTGGCGGG GGG GAGC
                        GAA
            5' GGGGCCGCCGCCTGCGC 81803 CA
                                            С
GAM3619 CNP
                    GG CCGCCGCC GCGC
                    CC GGCGGGCGG CGCG
                     CC
                         Α
GAM3619 DDX20 5' GGCACCGCCCCGCCTCTCG 81804
                                           _ CGCG
                    GGCACCGCCC GCC CTCG
                    CCGTGGCGGG CGG GAGC
                        G A
GAM3619 DVL1
            5' GGCGCTACCCGCCCGC 81805
                                        ACC
                                               GT
                    GGC GCCCGCCGC C CG
                    CCG TGGGCGGGCG G GC
                     CGA
GAM3619 FGFR1 5' AGCTGCCGCCGCCGCCG 81806
                                        A_
                                             CGC T
                    GGC CCGCCCGCC GC CG
```

AGTTAA AGTAACTCC

```
TCG GGCGGGCGG CG GC
                     AC
GAM3619 FGFR1 5' AGCTGCCGCCGCCGCCG 81806
                                              CGC T
                                        Α
                    GGC CCGCCCGCC GC CG
                    TCG GGCGGGCGG CG GC
                     AC
GAM3619 FGFR1 5' AGCTGCCGCCGCCGCCG 81806
                                              CGC T
                                        Α_
                    GGC CCGCCCGCC GC CG
                    TCG GGCGGGCGG CG GC
                     AC
GAM3619 FGFR1
            5' AGCTGCCGCCGCCGCCG 81806
                                        Α
                                              CGC T
                    GGC CCGCCCGCC GC CG
                    TCG GGCGGGCGG CG GC
                     AC
                                             CGC T
GAM3619 FGFR1 5' AGCTGCCGCCGCCGCCG 81806
                    GGC CCGCCCGCC GC CG
                    TCG GGCGGGCGG CG GC
                     AC
GAM3619 FGFR1 5' AGCTGCCGCCGCCGCCG 81806
                                              CGC T
                    GGC CCGCCCGCC GC CG
                    TCG GGCGGGCGG CG GC
                     AC
GAM3619 GPR30 5' AGGCACCGCCAGCCCCG
                                81807
                                           C G
                    AGGCACCGCC GCCC CG
                    TCCGTGGCGG CGGG GC
                        Т
            5' GCGCCGCCGCCGCCAGCTCG 81808
GAM3619 GSR
                                             C _
                    GC CCGCCCGCC GC GCTCG
                    CG GGCGGGCGG CG CGAGC
                     С
                         _ GT
GAM3619 HS3ST3B1 5' GGCGCGACGACGCGCTCG 81809
                                          ACC C_ CC
                    GGC GC CG CGCGCTCG
                    ||| || || || |||||
                    CCG CG GC GCGCGAGC
                      __ CT T_
GAM3619 KCNS2 5' AGGCGCCGGCCGCCGCG 81810
                                         A C
                    AGGC CCG CCGCCGCG
                    TCCG GGC GGCGGCGC
                     CC
GAM3619 LRP3
            5' GGCGCCGCCTCCTGCCCCGC 81811
                                         A C__ G
                    GGC CCGCC GCCC CGC
```

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CCG GGCGG CGGG GCG
                    C AGGA _
GAM3619 MYBL2 5' GGCCCCGGGCCGCGCTCGA 81812 ACCG C
                   GGC CCCG CCGCGCTCGA
                   CCG GGGC GGCGCGAGCT
                        CC
GAM3619 NFIA
           5' AGCCGCCGCCCGCTCGCG 81813 A
                                         С
                   GGC CCGCCCGC CGCG
                   TCG GGCGGGCG GCGC
                    GC
                         Α
GAM3619 NRGN
            5' GGTCCGGTCTCCCGCGCTCG 81814 CA CCCG
                   GG CCG CCCGCGCTCG
                   CC GGC GGGCGCGAGC
                    A CAGA
                                          CG
GAM3619 PITX1 5' GGCGCGCCCGCCGCT 81815
                                     AC
                   GGC CGCCCGCC GC CT
                   CCG GCGGGCGG CG GA
                    C_
                        _ _
GAM3619 PKD2 5' GGTGCGCGCGCGCGCTCG 81816 CAC CC
                   GG CGC GC CCGCGCTCG
                   CC GCG CG GGCGCGAGC
                    AC_ C_ C
GAM3619 PTMS
            5' AGGCGGTGCCGGCGCGCTCG 81817
                                         ACC C CC
                   AGGC GCC GCGCTCG
                   TCCG CGG CG CGCGAGC
                     CCA C
                                          CG G C
GAM3619 SULT1A3 5' GGCACCGCCTCCCCGTCA 81818
                   GGCACCGCC CCC CG TCG
                   CCGTGGCGG GGG GC AGT
                       A_ _ _
GAM3619 TARBP2 3' AGGCACCGTGTGCACTCG 81819
                                         CCCGCCC
                   AGGCACCG
                            GCGCTCG
                   TCCGTGGC
                             CGTGAGC
                      ACA
GAM3619 TR2
           5' GGCATCGCCCGCCTTTCCCG 81820
                                       С
                                           CGCG
                   GGCA CGCCCGCC CTCG
                   CCGT GCGGGCGG GGGC
                     Α
                         AAA_{-}
GAM3619 UBE3A 5' AGGCGCCGCCGCCGCAGCCGA 81821
                                          A C _ T
                   AGGC CCGCC GCCCGC GC CGA
```

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TCCG GGCGG CGGGCG CG GCT
                      C _ T _
GAM3619 C11orf24 3' GGTCCTGCCCGCCCCACCC 81822 CA _
                                                G
                    GG CC GCCCGCCC CGCTC
                    CC GG CGGGCGGG GTGGG
                     A A
GAM3619 C9orf12 5' GGGGCCGCCCGCCTCGCT 81823 CA
                                              CG
                     GG CCGCCCGCC CGCT
                     11 111111111 1111
                     CC GGCGGGCGG GCGA
                     CC
                           Α
GAM3619 CENTG2 5' GCGCCGCCGCCGACCT 81824 A
                                              CG
                     GC CCGCCCGCC GC CT
                     11 111111111 11 11
                     CG GGCGGGCGG TG GA
                     С
                          С
GAM3619 DKFZp434O0320 3' AGGCACCAGCTTGGCTTCG 81825
                                               CCC CC GC
                    AGGCACCG GC GC TCG
                    TCCGTGGT CG CG AGC
                        ___ AAC A_
GAM3619 DKFZP566F2124 5' GGCGTCCAGCGCCCGCGCTCG 81826 A CC
                     GGC CCG CGCCCGCGCTCG
                     CCG GGT GCGGGCGCGAGC
                      CA C
GAM3619 DKFZp761G0313 5' AGGCGCTGCCCTCCCGCCC 81827 ACC G G
                    AGGC GCCC CCCGC CT
                     TCCG CGGG GGGCG GG
                      CGA A
GAM3619 DNAJA3 3' AGGCACCGACTGTGCAGCTGCT 81828
                                              CC CC
                    AGGCACCG C GC GC GCT
                     TCCGTGGC G CG CGA
                        TACA T_ A
GAM3619 DREV1 5' AGGCACCGCCGCCTCCG
                                            C CG
                                   81829
                    AGGCACCGCC GCC CG
                     TCCGTGGCGG CGG GC
                        _ AG
GAM3619 DTX2
            5' GGCACCACCGCGCTCG
                                 81830
                                          CGCCC
                     GGCACCGCC GCGCTCG
                     CCGTGGTGG
                               CGCGAGC
GAM3619 EFS2
            5' GGGCGCTGGGCTGCGCTCGA 81831
                                          CAC CC_ CC
                    GG CGC GC GCGCTCGA
```

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CC GCG CG CGCGAGCT
                    C__ ACC A_
GAM3619 ERGL 3' AGACACTGCCTGCTTCCCA 81832 C C CCGCG
                    AGGCAC GCC GC CTCG
                    TCTGTG CGG CG GGGT
                      A A A A
                                        ACC C CC
GAM3619 FBXO9 5' GGCGGCCTGCTGCGCTCGA 81833
                    GGC GCC GCGCTCGA
                    CCG CGG CG CGCGAGCT
                     C A A
GAM3619 FLJ20174 5' GGCGCCGCGCCCGGGCTCGA 81834
                                          A CC C
                    GGC CCGC GCCCG GCTCGA
                    CCG GGCG CGGGC CGAGCT
                     C C
GAM3619 GBA2 5' AGGCACCGCCCCGGGACCTCG 81835
                                            G C G
                    AGGCACCGCCC CC GC CTCG
                    TCCGTGGCGGG GG TG GAGC
                        _ CCC _
GAM3619 HCAP-G 5' GACGAGTCCTGCCCGCGCTCG 81836
                                          ACCG C
                    GGC CC GCCCGCGCTCG
                    CTG GG CGGGCGCGAGC
                     CTCA A
GAM3619 HUMZD58C02 5' GGCGCGCGCGCGCTCG 81837 ACC CC C
                    GGC GC GC CGCGCTCG
                    CCG CG CG GCGCGAGC
                     __ C_ C
GAM3619 KIAA0237 5' GGCATCGCCCGCCACCACG 81838
                    GGCA CGCCCGCC CGCG
                    CCGT GCGGGCGG GTGC
                     Α
                         TG
GAM3619 KIAA1766 5' GGCCGCCGCCGCCGCTCG 81839
                                         A C C
                    GGC CCGCC GCC GCGCTCG
                    CCG GGCGG CGCGAGC
                     GC
GAM3619 LGI3
           5' GGCGCGCCCCGCTCTCGA 81840 ACC C
                                              G
                    GGC GC CGCCCGC CTCGA
                    CCG CG GCGGGCG GAGCT
                     ___ C
                          Α
GAM3619 LYSAL1 3' AGGCGTGAGCCACCGCGCTCG 81841
                                          ACC_ CGC
                    AGGC GCC CCGCGCTCG
```

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TCCG CGG GGCGCGAGC
                     CACT T__
GAM3619 MGC2714 5' GGCCGCCGCCCGCTCCCA 81842 AC C G
                    GGC CGCC GCCCGC CTCG
                    CCG GCGG CGGGCG GGGT
GAM3619 MGC2803 5' GGCCGCTCCGGCCCCGCGCT 81843
                                          AC _ _
                    GGC CGC CCGCGCT
                    CCG GCG GGC GGGCGCGA
                     A CG
GAM3619 MGC29643 5' AGCCTGCATCGCCCGCGCTCG 81844
                                           ACC C
                    GGC GC CGCCGCGCTCG
                    TCG CG GCGGGCGCGAGC
                     GA TA
GAM3619 NAKAP95 3' GGCTCCGCCCGCCCCGAGCTCG 81845
                                                _ C
                    GGC CCGCCCGCCC G GCTCG
                    CCG GGCGGGCGGG C CGAGC
                     Α
                         GT
GAM3619 PRAX-1 3' AGGCTCCGCCCGCCTGCCCG 81846
                                              CGC
                                          Α
                    AGGC CCGCCCGCC GCTCG
                    TCCG GGCGGGCGG CGGGC
                         Α
GAM3619 PRO2964 3' AGGCGTGAGCCACCGCGCTCG 81841
                                           ACC CGC
                    AGGC GCC CCGCGCTCG
                    TCCG CGG GGCGCGAGC
                     CACT T_
GAM3619 RNASE6PL 5' AGCCGCCGTCCGCCCACG 81847
                                         A C
                    GGC CCG CCGCCGCG
                    TCG GGC GGCGGGTGC
                     GC A
GAM3619 RNPC1 5' GGCCGCGGGAAGCCCGCGCTCG 81848
                                           AC CCC_
                    GGC CG GCCCGCGCTCG
                    CCG GC CGGGCGCGAGC
                     GC CCTT
GAM3619 SARM
            5' AGGCACCGCCAGCCGCTCG 81849
                                           C CGC
                    AGGCACCGCC GCC GCTCG
                    TCCGTGGCGG CGG CGAGC
                       Т
                                           CCC CCGC__ C
GAM3619 SAST
            5' AGGCACCGTTGCTTATGAGCTT 81850
        GA
                     AGGCACCG GC GCT GA
```

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TCCGTGGC CG
                                   CGA CT
                         AA_ AATACT A
GAM3619 SDS3
            5' GACACCGCGCCCCCCGCGCTC 81851
         G
                      GGCACCGC CCGCCCGCGCTCG
                     CTGTGGCG GGTGGGCGCGAGC
                         CC
GAM3619 SNTG1 5' AGGCACCGCCTTTTAGCTGCGA 81852
                                                CGCCCGC _
                     AGGCACCGCC
                                  GCT CGA
                            111 111
                     CGA GCT
                     TCCGTGGCGG
                         AAAAT C
GAM3619 LOC123591 5' AGCGCCGCTTCGCGCTCG 81853
                                            A CCGCC
                     GGC CCGC CGCGCTCG
                     TCG GGCG GCGCGAGC
                      C AA
GAM3619 LOC131583 5' GACGCCGGGGACTCGCGCTCG 81854 A CCC C
                     GGC CCG GC CGCGCTCG
                     CTG GGC TG GCGCGAGC
                      C CCC A
GAM3619 LOC143384 5' GGCACCGCTGCCTCCCCGA 81855
                                               CC CGCG
                     GGCACCGC GCC CTCGA
                     CCGTGGCG CGG GGGCT
                         A_ AG__
GAM3619 LOC150538 3' AGCTACCGCCCGCCGGGCCG 81856
                                                   CCT
                     GGC ACCGCCCGCC G GC CG
                     TCG TGGCGGGCGG C CG GC
                           _ C _
GAM3619 LOC158297 5' GGCACGCCCAGGCTCG
                                            CGCCC C
                                     81857
                     GGCAC GCCCG GCTCG
                     CCGTG CGGGT CGAGC
                             C
GAM3619 LOC200269 3' GGCACCTCCGCCACCG
                                            GC CGC T
                                     81858
                     GGCACC CCGCC GC CG
                     CCGTGG GGCGG TG GC
                        \mathsf{A}_{\_}
GAM3619 LOC201522 5' GGTCCGCCCGCCGTCCCG 81859 CA
                                                  CGCG
                     GG CCGCCCGCC CTCG
                     11 111111111 1111
                     CC GGCGGGCGG GGGC
                      \mathsf{A}_{-}
                           CA_{-}
GAM3619 LOC219800 5' AGGCATCGCCCTCCGCACCCG 81860
                                                  GC
                     AGGCA CGCCC CCGCGCTCG
```

11111 11111 111111111

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TCCGT GCGGG GGCGTGGGC
                      A A_
GAM3619 LOC253981 5' GGCGCCGCGTCCCGCGCTCG 81861
                                            A CCG
                    GGC CCGC CCCGCGCTCG
                    CCG GGCG GGGCGCGAGC
                      C CA
GAM3619 LOC255413 3' AGGCACTGCGCGCTCG
                                   81862
                                          C CCGCCC
                    AGGCAC GC
                               GCGCTCG
                    TCCGTG CG
                               CGCGAGC
GAM3619 LOC90719 5' GGCGGGGAGCCGCCCGCGCTCG 81863
                                             ACCGC
                    GGC
                          CCGCCCGCGCTCG
                    Ш
                       CCG GGCGGGCGCGAGC
                     CCCCTC
GAM3619 LOC92405 5' AGGCCCGCTCGCCCGCGCTCG 81864
                                            A C
                    AGGC CCGC CGCCCGCGCTCG
                    TCCG GGCG GCGGGCGCGAGC
GAM3620 HDGF
             5' CGCGGTGGGTGCGCGCTCGTCG 81867
                                           T TC C
                    CGC GT GT CGCGCTCGTCG
                    GCG CA CA GCGCGAGCAGC
                     CCCC
GAM3620 C20orf21 3' CGCTGTCCAGGCGCTTGT 81868
                                           TCC C
                    CGCTGTTCG GCGCT GT
                    GCGACAGGT CGCGA CA
                        C__ A
GAM3620 LANO
             5' CGCTGCCCTCTCCGCGCTCGT 81869
                                            G
                    CGCTGTTC TCCGCGCTCGT
                    GCGACGG AGGCGCGAGCA
                       AG
GAM3621 ATP1B1 3' TACACTAAATAAAATACACAA 81872
                                            CTTGA_
                    TACACTGAA
                               GCACAA
                    ATGTGATTT
                               TGTGTT
                        ATTTTA
GAM3621 CYP51 3' TACCCTGAACTTATTTGGCA 81873
                                         Α
                    TAC CTGAACTTG GCA
                    ATG GACTTGAAT CGT
                     G
                          AAAC
GAM3621 DTR
            3' CCGATTCCTTGAGCACAA 81874
```

CTGA CTTGAGCACAA

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GGCT GAACTCGTGTT
                      AAG
                                         ACT _
GAM3621 EGLN2 5' TACACTGATGATGCAC 81875
                     TACACTGA TGA GCAC
                     ATGTGACT ACT CGTG
                         ___ A
            3' TACACTGAAATGTACTAACAAA 81876
GAM3621 FAT
                                            CT A __
                     TACACTGAA TG GC ACAAA
                     ATGTGACTT ACTG TGTTT
                        T_A AT
GAM3621 FLRT2 3' TACACTGATCACCTTCACA 81877
                                           GA
                     TACACTGA ACTT GCA
                     ATGTGACT TGGA TGT
                        AG AG
GAM3621 HDAC5 3' TACACTGAGCCTGGCCCCA 81878
                                            A A A
                     TACACTGA CTTG GC CA
                     ATGTGACT GGAC CG GT
                        C _ GG
GAM3621 HLF
            3' CACACACATGAGCACAA 81879
                                        TGA T
                     TACAC AC TGAGCACAA
                     GTGTG TG ACTCGTGTT
                       ____T
GAM3621 HNF3B 3' TACACCGAGTCACTCACAAA 81880
                                            AC AG
                     TACACTGA TTG CACAAA
                     ATGTGGCT AGT GTGTTT
                        C_ GA
GAM3621 IL22RA2 3' CACTTGCCTAAGCACAAA 81881
                                         GAA
                     CACT CTTGAGCACAAA
                     GTGA GGATTCGTGTTT
                      AC_{-}
GAM3621 LPIN1 3' CACATTGAACTTGACACA 81882
                                        С
                                             G
                     TACA TGAACTTGA CACA
                     GTGT ACTTGAACT GTGT
GAM3621 LRP8
            3' TACACTGACCTTCGCCAAA 81883
                                           A GA A
                     TACACTGA CTT GC CAAA
                     ATGTGACT GGA CG GTTT
                        _ AG _
GAM3621 LRP8
            3' TACACTGACCTTCGCCAAA 81883
                                           A GA A
```

TACACTGA CTT GC CAAA

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ATGTGACT GGA CG GTTT
                        _ AG _
GAM3621 MGAT4B 5' TACACTGACACTAATGCTCA 81884
                                             TGA A
                     TACACTGA ACT GC CA
                     ATGTGACT TGA CG GT
                        G TTA A
GAM3621 P53AIP1 3' TACACTGAGACTCAGGCA 81885
                                            GA
                     TACACTGA ACTT GCA
                     ATGTGACT TGAG CGT
                        C TC
GAM3621 PATE 3' TACAGTGAAAGCACAA 81886
                                        C ACTT
                     TACA TGA GAGCACAA
                     ATGT ACT TTCGTGTT
                       С
GAM3621 PRKACB 3' ACACTGAACTAAATGTGCA 81887
                     ACACTGAACT TG GCA
                     TGTGACTTGA AC CGT
                         TTT A
GAM3621 SH3GL2 3' TAAACTGCTAAGCACAAA 81888
                     TGAACT TGAGCACAAA
                     ATTTGA ATTCGTGTTT
                        CG
GAM3621 SLC6A12 3' ACACTGGCCTGAGCACAA 81889
                                            AA
                     ACACTG CTTGAGCACAA
                     TGTGAC GGACTCGTGTT
                        \mathsf{C}_{-}
GAM3621 SP3
            3' TACACTAAACCACACA
                                          TGA
                               81890
                     TACACTGAACT GCACA
                     ATGTGATTTGG TGTGT
GAM3621 TAF7L 3' TACCTGAACAGAGACA
                                        A TT C
                                  81891
                     TAC CTGAAC GAG ACA
                     111 111111 111 111
                     ATG GACTTG CTC TGT
                         T_ _
GAM3621 THBS1 3' CACACTGATGCAAGCACA 81892
                                            ACT
                     TACACTGA TGAGCACA
                     GTGTGACT GTTCGTGT
                        AC_{-}
GAM3621 TRAM
             3' TACACTAAAAATGGCACAAA 81893
                                             CT A
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TACACTGAA TG GCACAAA

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ATGTGATTT AC CGTGTTT
                        TT _
GAM3621 WRB
            3' ACACAAGTTGAGCACAAA 81894
                                        TGAAC
                     ACAC TTGAGCACAAA
                     TGTG AACTCGTGTTT
                      TTC
GAM3621 XK
           3' TACACCTGAACTGGGTGAG 81895
                     TACAC TGAACT TGAG
                     ATGTG ACTTGA ACTC
                       G
                          CCC
GAM3621 YWHAB 3' ACACTGAACAGATCACAAA 81896
                                            TT G
                     ACACTGAAC GA CACAAA
                     TGTGACTTG CT GTGTTT
                        T A
GAM3621 YWHAB 3' ACACTGAACAGATCACAAA 81896
                                            TT G
                     ACACTGAAC GA CACAAA
                     TGTGACTTG CT GTGTTT
                        T_ A
GAM3621 ADMP
             3' TACACTGAATGAAAGTACAAA 81897
                                            CTT C
                     TACACTGAA GAG ACAAA
                     ATGTGACTT TTC TGTTT
                        ACT A
GAM3621 AKAP11 3' TACACCGAGTGATAACACAAA 81898
                                             ACTTG
                     TACACTGA AGCACAAA
                     ATGTGGCT TTGTGTTT
                        CACTA
                                         TTG
GAM3621 AMOT
             3' CACTGATACAGCACAAA
                                  81899
                     CACTGA AC AGCACAAA
                     GTGACT TG TCGTGTTT
                       Α ____
GAM3621 AP3M2 3' CACACTGAACTAGGACAAA 81900
                                            TG C
                     TACACTGAACT AG ACAAA
                     GTGTGACTTGA TC TGTTT
                         __ C
GAM3621 C6orf9 5' CTGAGCCAAAAGCACAAA 81901
                                        A T_
                     CTGA CT GAGCACAAA
                     GACT GG TTCGTGTTT
                      C TT
GAM3621 DJ328E19.C1.1 3' ACACTGAAGACACAA
                                    81902
                                             CTT G
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ACACTGAA GA CACAA

TGTGACTT CT GTGTT

GAM3621 DKFZp434F1719 3' TACACTGAGGCTTGATCA 81903 A G TACACTGA CTTGA CA ATGTGACT GAACT GT CC A GAM3621 DKFZp434K114 3' TACACTGAGTGTCACTTAAA 81904 TACACTGA ACTTGAG ATGTGACT TGAATTT CACAG GAM3621 DKFZp761B0514 3' TACACTGAAAGGGCACAA 81905 **CTTGA** TACACTGAA GCACAA ATGTGACTT CGTGTT TCC GAM3621 EML4 3' TACCTGAACTTTATCACAAA 81906 A GAG TAC CTGAACTT CACAAA ATG GACTTGAA GTGTTT ATA GAM3621 FBX30 3' CACACTGAGAGGCTCCACAAA 81907 ACTT ____ TACACTGA GAG CACAAA GTGTGACT CTC GTGTTT CGAG GAM3621 FLJ13769 3' CACTGAACTTTGCCTCAAA 81908 GA A CACTGAACTT GC CAAA GTGACTTGAA CG GTTT A_ GA GAM3621 FLJ20086 3' CACACTGACAAAAAGCACAAA 81909 **ACTT** TACACTGA GAGCACAAA GTGTGACT TTCGTGTTT GTTT GAM3621 FLJ20445 3' ACACTGAAACACACAAA 81910 **CTTGA** ACACTGAA GCACAAA TGTGACTT TGTGTTT TG _ TGAG GAM3621 FLJ31168 3' ACACTGAATCCCACAAA 81911 ACACTGAA CT CACAAA TGTGACTT GG GTGTTT GAM3621 HBP17 3' CACTCACTAAGCACAAA 81912 GA T CACT ACT GAGCACAAA

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GTGA TGA TTCGTGTTT
G_ _
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GAM3621 HEF1 3' TGACTGAACCACTCACAAA 81913 C TGAG

A ACTGAACT CACAAA

A TGACTTGG GTGTTT

C TGA

GAM3621 KIAA0097 3' TACACTAAACTCATCCAC 81914

TACACTGAACTTG CAC

AG

ATGTGATTTGAGT GTG

AG

GAM3621 KIAA0140 3' CACACTGAAAACACAA 81915 ACTT

TACACTGA GAGCACAA

GTGTGACT TTTGTGTT

GAM3621 KIAA0186 3' TACACTGAAAACTACAAA 81916 ACTT _

TACACTGA GAGC ACAAA

ATGTGACT TTTG TGTTT

__ /

GAM3621 KIAA0217 3' TACACTGAATGACACAAA 81917 CT G

TACACTGAA TGA CACAAA

ATGTGACTT ACT GTGTTT

GAM3621 KIAA0895 3' ACTGAACCAATAGCACAAA 81918 TG_

ACTGAACT AGCACAAA

TGACTTGG TCGTGTTT

TTA

GAM3621 KIAA1058 3' ACTGGAACAGCACAAA 81919 _ TTG

ACTG AAC AGCACAAA

TGAC TTG TCGTGTTT

C ___

GAM3621 KIAA1243 3' CACTGAACTGGCCAA 81920 TAA

CACTGAACT G GC CAA

GTGACTTGA C CG GTT

GAM3621 KIAA1332 3' CATTGAAGGGAACACAAA 81921 C CTT

CATGAA GAGCACAAA

GT ACTT CTTGTGTTT

A CC_

GAM3621 KIAA1649 3' CACACTGAAAAACACAA 81922 CTT

TACACTGAA GAGCACAA

GTGTGACTT TTTGTGTT

GAM3621 KIAA1649 5' CACACTGAAAAACACAA 81922 CTT TACACTGAA GAGCACAA GTGTGACTT TTTGTGTT GAM3621 KIAA1718 3' ACTGAACTACTACAAA TGA _ 81923 ACTGAACT GC ACAAA TGACTTGA TG TGTTT GAM3621 KIAA1829 3' TACACTGAAGCTAAACACA 81924 TACACTGAA TTGAGCACA ATGTGACTT GATTTGTGT С 81925 A ACT GAM3621 KIAA1870 3' TACCTGATGAGCACAA TAC CTGA TGAGCACAA ATG GACT ACTCGTGTT GAM3621 MBLR 3' TACACTGAAATTTTATGGCACA 81926 CT A TACACTGAA TG GCACA ATGTGACTT AC CGTGT TAAAAT GAM3621 MGC2488 3' CATTGAGTTTAAACACAAA 81927 C AC CATGA TTGAGCACAAA GT ACT AATTTGTGTTT A CA GAM3621 MGC30052 3' TAAACAACTGAGCACAAA 81928 TGAAC TTGAGCACAAA ATTTG GACTCGTGTTT TT GAM3621 NDP52 3' CATTGAACTTAGTTCACAAA 81929 C AG_{-} CA TGAACTTG CACAAA GT ACTTGAAT GTGTTT CAA GAM3621 NLN 3' TGACTGAACTTTAGACA 81930 C GC A ACTGAACTT AG ACA 1 111111111 11 111 A TGACTTGAA TC TGT С Α _ GAM3621 P311 81931 3' CACACTGAAGACACAA CTT G TACACTGAA GA CACAA

GTGTGACTT CT GTGTT

GAM3621 POPX1 3' ACACTGAACTTGGCCA A81932 ACACTGAACTTG GC CA TGTGACTTGAAC CG GT GAM3621 PRDM10 3' TACACTGAACATGTCAGCA 81933 Τ __ TACACTGAAC TG AGCA ATGTGACTTG AC TCGT T AG GAM3621 PTPRN2 3' TACGCTGAACCCCACACA 81934 GA TAC CTGAACTT GCACA ATG GACTTGGG TGTGT С G GAM3621 PTPRN2 3' TACGCTGAACCCCACACA 81934 GA TAC CTGAACTT GCACA ATG GACTTGGG TGTGT С $G_{\underline{}}$ GAM3621 SEPT3 3' ACACTGAACACGACACA 81935 T G ACACTGAAC TGA CACA TGTGACTTG GCT GTGT GAM3621 SLC2A12 3' ACACTGAAAAGAGAGCACA 81936 CTT ACACTGAA GAGCACA TGTGACTT CTCGTGT TTCT GAM3621 Spir-1 3' ACGCTGACTCGTAGCACAAA 81937 A A _ AC CTGA CTTG AGCACAAA TG GACT GAGC TCGTGTTT C _ A GAM3621 STAF65(gamma) 3' TACTCTGAACTTAATGCA 81938 TAC CTGAACTTGA GCA 111 11111111111111111 ATG GACTTGAATT CGT Α GAM3621 VDAC3 3' ACTGAAACGTGGCACAAA 81939 _ T A ACTGAA C TG GCACAAA TGACTT G AC CGTGTTT TC_ GAM3621 ZNF185 3' CACACACTGAGCACAAA 81940 TGA T

CAC ACT GAGCACAAA

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GTG TGA CTCGTGTTT
                      TG_ _
GAM3621 LOC134553 3' TACACTTGAACCTATGTACAAA 81941
                                              AGC
                     TACACT GAACTTG ACAAA
                     ATGTGA CTTGGAT TGTTT
                       Α
                           ACA
GAM3621 LOC145009 3' TACCCTGAACTTATTTGGCA 81873 A A_
                     TAC CTGAACTTG GCA
                     ATG GACTTGAAT CGT
                      G
                           AAAC
GAM3621 LOC149013 3' ACACTGAAGACACAA 81902
                                           CTT G
                     ACACTGAA GA CACAA
                     TGTGACTT CT GTGTT
GAM3621 LOC149317 3' ACACTGAAGACACAA 81902
                                          CTT G
                     ACACTGAA GA CACAA
                     TGTGACTT CT GTGTT
GAM3621 LOC149734 3' TAACTGAACCTCACAA 81942 C
                                             GAG
                     A ACTGAACTT CACAA
                     A TGACTTGGA GTGTT
                     Т
GAM3621 LOC150084 5' CACATTGAACTTAACACA 81943
                                                G
                     TACA TGAACTTGA CACA
                     GTGT ACTTGAATT GTGT
GAM3621 LOC151162 5' ACACTGAATCCTCACAAA 81944
                                             GAG
                     ACACTGAA CTT CACAAA
                     TGTGACTT GGA GTGTTT
                        Α ___
GAM3621 LOC155434 3' ACACTGAACTCAAGCACAA 81945
                                              TG
                     ACACTGAACT AGCACAA
                     TGTGACTTGA TCGTGTT
                         GT
GAM3621 LOC161734 3' TACACTGAAATAATTAACAA 81946
                                              CT GC_
                     TACACTGAA TGA ACAA
                     ATGTGACTT ATT TGTT
                         \mathsf{T}_{-} AAT
                                             _ GAG
GAM3621 LOC203377 5' ACACTGAATCCTCACAAA 81944
                     ACACTGAA CTT CACAAA
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TGTGACTT GGA GTGTTT
                        Α ___
GAM3621 LOC220638 3' ACACTGAAGACACAA 81902 CTT G
                    ACACTGAA GA CACAA
                    TGTGACTT CT GTGTT
GAM3621 LOC221288 5' TACACTAATTCTGTAACACAAA 81947
                                             AC _
                    TACACTGA TTG AGCACAAA
                    ATGTGATT GAC TTGTGTTT
                       AA A
GAM3621 LOC255223 3' CACTGGGTGCAGCACAAA 81948
                                           AACT
                    CACTG TG AGCACAAA
                    GTGAC AC TCGTGTTT
                      CC G
GAM3621 LOC257031 3' ACACTGAAGACACAA 81902
                                         CTT G
                    ACACTGAA GA CACAA
                    TGTGACTT CT GTGTT
GAM3621 LOC257471 3' TACACTAAACCACACA
                                           TGA
                                  81890
                    TACACTGAACT GCACA
                    ATGTGATTTGG TGTGT
GAM3621 LOC51026 3' TACACTTGAACAATGACA 81949
                                          _ T_ G
                    TACACT GAAC TGA CA
                    ATGTGA CTTG ACT GT
                       A TT _
GAM3621 LOC91548 5' ACACTGAACAGCAACAAA 81950
                                            TTG
                    ACACTGAAC AGCA CAAA
                    TGTGACTTG TCGT GTTT
                        ___ T
GAM3622 ALS2 3' TATAAAGTAGAGCAAAAACC 81953
                                         A GTA
                    TATAAAGTA AGTAAA GACC
                    ATATTTCAT TCGTTT TTGG
                        С
GAM3622 FBXL5 3' TAAAGTCCTCAAAGTAGA 81954
                                         AAAG
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TAAAGT TAAAGTAGA

ATTTCA GTTTCATCT

TAAAGT TAAAGTAGA

AAAG

 GGA_{-}

GAM3622 FBXL5 3' TAAAGTCCTCAAAGTAGA 81954

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GGA
GAM3622 PCDH11X 5' TATAAAGTACAAGTAAGCAA 81955
                                                Α
                     TATAAAGTA AAGTAA GTAG
                     ATATTTCAT TTCATT CGTT
                         G
GAM3622 PCDH11X 5' TATAAAGTACAAGTAAGCAA 81955
                                                 Α
                     TATAAAGTA AAGTAA GTAG
                     ATATTTCAT TTCATT CGTT
                         G
GAM3622 PCDH11X 5' TATAAAGTACAAGTAAGCAA 81955
                                                 Α
                     TATAAAGTA AAGTAA GTAG
                     ATATTTCAT TTCATT CGTT
                         G
GAM3622 PCDH11Y 5' TATAAAGTACAAGTAAGCAA 81955
                                                 Α
                     TATAAAGTA AAGTAA GTAG
                     ATATTTCAT TTCATT CGTT
                         G
GAM3622 PCDH11Y 5' TATAAAGTACAAGTAAGCAA 81955
                                                 Α
                     TATAAAGTA AAGTAA GTAG
                     ATATTTCAT TTCATT CGTT
                         G
GAM3622 PIP5K1B 3' TATAAAGTGAAGGCAGACC 81956
                                             A TAAA
                     TATAAAGT AAG GTAGACC
                     ATATTTCA TTC CGTCTGG
                        С
GAM3622 STE
            3' GTTAAGTAAAGAAGACC 81957 A
                                            Т
                     GT AAGTAAAG AGACC
                     CATTCATTTC TCTGG
                      Α
                          TT
GAM3622 KIAA0532 5' TATAAAATAAGACTTCATAGAC 81958
                                               AG AAA
         CC
                      TATAAAGTAA T GTAGACCC
                     ATATTTTATT G TATCTGGG
                         CT AAG
                                              AAA_ A
GAM3622 KIAA1908 3' AGTAAAGCCATCATGGACCC 81959
                     AGTAAAGT GT GACCC
                     TCATTTCG TA CTGGG
                        GTAG C
GAM3622 SH3BGRL2 3' TATGGAGCAAAGTGCAGCC 81960
                                            AA
                                                  AAA A
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TAT AGTAAAGT GTAG CC

ATTTCA GTTTCATCT

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ATA TCGTTTCA CGTC GG
                      CC
GAM3622 LOC146540 3' GTGAAGTAAAGATAACACCC 81961 A
                     GT AAGTAAAG TAG ACCC
                     CA TTCATTTC ATT TGGG
                         T G
                     C
GAM3622 LOC155435 3' ATAAAGTAAGTCGGTAGGCC 81962
                                              A AAA A
                     ATAAAGTAA GT GTAG CC
                     TATTTCATT CA CATC GG
                        GC C
GAM3622 LOC256568 3' TATAAAGTAGAGCAATGT 81963
                     TATAAAGTA AGTAA GT
                     ATATTTCAT TCGTT CA
                        C A
GAM3623 ARNTL 3' AGAACAAGGGAAACATTT 81966
                                          CA T
                     AGAACAAG GAAC ATTT
                     TCTTGTTC TTTG TAAA
                        CC _
             3' ACAGAAACAAGCTATTCATTTT 81967
                                              AGAAC
GAM3623 CCNC
        CA
                      ACAGAA CAAGC TATTTTCA
                     TGTCTT GTTCG GTAAAAGT
                       T ATAA
GAM3623 EPB72 3' ACAGAACAAGGAGGAATCATTT 81968
                                              CA C
                     ACAGAACAAG GAA TATTT
                     TGTCTTGTTC CTT GTAAA
                         CTC A
GAM3623 GYG
            3' AGAACACACTGCTATTTTCA 81969
                                          A AGAA
                     AGAACA GC CTATTTCA
                     TCTTGT TG GATAAAAGT
                       G AC
             3' CAAAACCTCACAGCTATTTT 81970
GAM3623 HPGD
                                           AA_ AA
                     CAGAAC GCAG CTATTTT
                     GTTTTG TGTC GATAAAA
                       GAG
GAM3623 IL13RA1 3' CAGAACAAAGTAGAACATCT 81971
                                            _C T
                     CAGAACAA G AGAAC ATTT
                     GTCTTGTT C TCTTG TAGA
                        ΤА
GAM3623 MAB21L1 3' AGAACAAGCAATATTT
                                  81972
                                           AAC
                     AGAACAAGCAG TATTT
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TCTTGTTCGTT ATAAA

GAM3623 MCL1 3' CAGAACAATCAGCAATTTCA 81973 G AACTAT CAGAACAA CAG TTTCA GTCTTGTT GTC AAAGT A GTT GAM3623 MYO1D 3' ACAGATAAGCAGAACACCTT 81974 AC Τ ACAGA AAGCAGAAC ATTTT TGTCT TTCGTCTTG TGGAA Α GAM3623 NONO 3' ACAGAATACAGCAGACCCAGTT 81975 CA_ Α __ **TTTCA** ACAGAA AGCAGA CTA TTTTCA TGTCTT TCGTCT GGT AAAAGT ATG G CA C C CTAT GAM3623 NR3C2 3' ACAGAAAAAGTAGAAAGGTTTC 81976 ACAGAA AAG AGAA TTTCA Α TGTCTT TTC TCTT AAAGT T A TCC GAM3623 PCDHA9 3' ACAGAACAAGTGAATTCTC 81977 CA ACT ACAGAACAAG GA ATTTTC TGTCTTGTTC CT TAAGAG A_ _ GAM3623 PEPD 3' AGAACAGCATTATTTTC 81978 A GAAC AGAACA GCA TATTTTC TCTTGT CGT ATAAAAG Α CAT GAM3623 PTPRC 3' AGAACAAGGAGGACATCTT 81979 AGAACAAG AG AC ATTTT TCTTGTTC TC TG TAGAA CC_{-} GAM3623 PTPRC 3' AGAACAAGGAGGACATCTT 81979 CATAGAACAAG AG AC ATTTT 11111111 11 11 11111 TCTTGTTC TC TG TAGAA CC_{-} GAM3623 RAD21 3' ACATAGCATCAACTATTTTCA 81980 _ G_ ACA AGCA AACTATTTCA TGT TCGT TTGATAAAAGT A AG GAM3623 RPA2 3' ACAGAAGAGCAGTAAGTTTCA 81981 CA AACTAT ACAGAA AGCAG TTTCA

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TGTCTT TCGTC AAAGT
                       C_ ATTC__
GAM3623 SOD2 3' ACAAAGCATTTACTATTTTCA 81982
                                         _ GA
                    ACAA GCA ACTATTTCA
                    TGTT CGT TGATAAAAGT
                      T AAA
GAM3623 SSRP1 3' ACAGGACAAGCAGCAGCTA 81983
                                          Α
                                              AA
                    ACAG ACAAGCAG CTA
                     TGTC TGTTCGTC GAT
                      С
                          GTC
GAM3623 THY1
            3' ACAGAACAGGAAGAACCA 81984
                                          AGC
                    ACAGAACA AGAACTA
                    TGTCTTGT TCTTGGT
                        CCT
GAM3623 ABCA8 3' ACAGAACAATGGAACCA 81985
                                          GCA
                    ACAGAACAA GAACTA
                    TGTCTTGTT CTTGGT
                        AC_{-}
GAM3623 C21orf7 3' AGAACAAGGAGAAATTGTTTCA 81986
                                            C CTAT
                     AGAACAAG AGAA TTTCA
                     TCTTGTTC TCTT AAAGT
                        C TAAC
GAM3623 CABP5 3' ACAGGAGAAGAGACTATTTTCA 81987
                                           AAC C A
                    ACAG AAG AGA CTATTTTCA
                     TGTC TTC TCT GATAAAAGT
                      CTC _ _
                                          ACAA AAC
GAM3623 CRIPT 3' CAGAGCAGGGATTTATTTCA 81989
                    CAGA GCAG TATTTTCA
                     GTCT CGTC ATAAAAGT
                         CCTAA
GAM3623 CRIPT 3' ACAGAACTGAGAAATATTTTCA 81988
                                           AAGC C
                    ACAGAAC AGAA TATTTTCA
                     TGTCTTG TCTT ATAAAAGT
                       AC__ T
GAM3623 DDM36 3' CAGGGCAAGCAGAAGCACT 81990
                                          AA
                                               C
                     CAG CAAGCAGAA TATT
                     GTC GTTCGTCTT GTGA
                      CC
                           С
GAM3623 DKFZP564K2062 3' AAACAAGCAGGACTTTCCA 81991
                                                 A AT
                    GAACAAGCAG ACT TTTCA
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TTTGTTCGTC TGA AAGGT
    С
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GAM3623 DKFZP586M0622 5' ACAGAAAAGCAGCCCGTTTCA 81992 C AA AT ACAGAA AAGCAG CT TTTCA TGTCTT TTCGTC GG AAAGT _ __ GC GAM3623 FIBL-6 3' ACAGAGTGTAGCACCATTTTCA 81993 ACA_ AGA ACAGA AGC ACTATTTCA TGTCT TCG TGGTAAAAGT CACA GAM3623 H2AV 3' ACAAATAAGCAGTTTTATTTTC 81994 AC AAC Α ACAGA AAGCAG TATTTTCA TGTTT TTCGTC ATAAAAGT A AAA GAM3623 KIAA0408 3' ACAAAACATCAAAAACTATTTT 81995 AGC CA ACAGAACA AGAACTATTTCA TGTTTTGT TTTTGATAAAAGT AGT GAM3623 KIAA0530 5' GAACAAGCAGGATTCCCA 81996 AACT TT GAACAAGCAG ATT CA CTTGTTCGTC TAA GT C GG GAM3623 KIAA0546 3' GAACAACAGACTATTTT 81997 G A GAACAA CAGA CTATTTT CTTGTT GTCT GATAAAA GAM3623 KIAA0748 3' CAGCAACAGGCCATTTTC 81998 AACAA AA CAG GCAG CTATTTTC GTC TGTC GGTAAAAG GT___ C_ GAM3623 KIAA1054 3' CAGATAAGATGAAGCTATTTTC 81999 AC CA CAGA AAG GAA CTATTTTCA GTCT TTC CTT GATAAAAGT A_ TA C GAM3623 KIAA1077 3' ACACAACAAGGATATTTTC 82000 G CA AC ACA AACAAG GA TATTTTC TGT TTGTTC CT ATAAAAG

GAM3623 KLF12 3' AGAAAAGCAGCTATTTCA 82001 AA AGAA AAGCAG CTATTTTCA

G

TCTT TTCGTC GATAAAAGT

GAM3623 MGC2963 3' ACAGAACAAGCAGCGAATTCA 82002 AACTATT ACAGAACAAGCAG TTCA TGTCTTGTTCGTC AAGT GCTT GAM3623 ODZ2 3' CAGAACAAGTGGGTCATATTTT 82003 CAGAAC CAGAACAAG TATTTT IIIIII GTCTTGTTC ATAAAA **ACCCAGT** GAM3623 RNPC2 3' CAGAACAAGAGAACAGTTTT 82004 C TA CAGAACAAG AGAAC TTTT GTCTTGTTC TCTTG AAAA TC GAM3623 SEMA4F 3' GAAGAATAAGCAGAACCA 82005 C C A AGAA AAGCAGAACTA C TCTT TTCGTCTTGGT T A GAM3623 TRIM31 5' ACAGAACAACAGGGCTGTTTCA 82006 G AA AT ACAGAACAA CAG CT TTTCA TGTCTTGTT GTC GA AAAGT _ CC C_ GAM3623 ZNF396 3' AGACAAGCAGTCATTTTCA 82007 A AAC AGA CAAGCAG TATTTTCA TCT GTTCGTC GTAAAAGT GAM3623 LOC127162 3' AGAACAAGTAGAACACATTT 82008 C _ AGAACAAG AGAAC TATTT TCTTGTTC TCTTG GTAAA A T GAM3623 LOC131870 3' ACAAGAGCAAGTCTATTTTCA 82009 AACA AA ACAG AGCAG CTATTTTCA TGTT TCGTT GATAAAGT C___ CA GAM3623 LOC133088 5' GAACAAGCAGTGCTTTTCA 82010 **AACTA** GAACAAGCAG TTTTCA CTTGTTCGTC AAAAGT ACG__ GAM3623 LOC145652 3' ACAAAGCAAGGAGCTCTATTTT 82011 A C AA ACAGA CAAG AG CTATTTT

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TGTTT GTTC TC GATAAAA
                       C C GA
GAM3623 LOC148280 5' ACGAAACAAGCAGTTTTC 82012 AG AACTA
                    AC AACAAGCAG TTTTC
                    TG TTGTTCGTC AAAAG
                     CT
GAM3623 LOC150005 3' ACAGACACAGGATATTTTC 82013
                                           ACAA AAC
                    ACAGA GCAG TATTTTC
                     TGTCT TGTC ATAAAAG
                      G CT
GAM3623 LOC150166 3' ACAGAACAACGTAGGACCA 82014
                                             GC A
                    ACAGAACAA AG ACTA
                     TGTCTTGTT TC TGGT
                        GCA C
GAM3623 LOC152300 3' GAAGAACAAGCAGGTGTTATTT 82015 C
                                                 AAC
        Т
                     A AGAACAAGCAG TATTTT
                    C TCTTGTTCGTC ATAAAA
                     Т
                          CACA
GAM3623 LOC153937 5' GAACAAGCAGGATTCCCA 81996
                                           AACT TT
                     GAACAAGCAG ATT CA
                     CTTGTTCGTC TAA GT
                        C GG
GAM3623 LOC201895 3' CAAGGTGTTAACTATTTTCA 82016
                                           CAG
                    CAAG AACTATTTCA
                     GTTC TTGATAAAAGT
                      CACAA
GAM3623 LOC202347 3' AGAATAAAATAACTATTTTCA 82017
                                           C CAG
                    AGAA AAG AACTATTTCA
                     TCTT TTT TTGATAAAAGT
                      A TA
GAM3623 LOC220883 3' GAAAAGCAGAAGCACTTT 82018
                                          С
                                              С
                     GAA AAGCAGAA TATTTT
                     CTT TTCGTCTT GTGAAA
GAM3623 LOC221421 3' ACAGAACAGGCAGGCCAAGTTC 82019
                                              A AA TT
        Α
                     ACAGAACA GCAG CTA TTCA
                     TGTCTTGT CGTC GGT AAGT
                        C C_ TC
GAM3623 LOC253716 3' CAGGAACAGGCCATTTTC 82020
                                          AACA AA
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CAG AGCAG CTATTTTC

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C___ C_
GAM3623 LOC257608 5' ACAGAACAACAGGGCTGTTTCA 82006 G AA AT
                     ACAGAACAA CAG CT TTTCA
                     TGTCTTGTT GTC GA AAAGT
                         _ CC C_
GAM3623 LOC90557 3' AAACAAGCTTTATTTTC
                                   82021
                                            AGAAC
                     GAACAAGC TATTTTC
                     TTTGTTCG ATAAAAG
                         AA
GAM3623 LOC91115 3' ACAGAACAGGACAGGGATTTTC 82022
                                               A_ AACT
         Α
                      ACAGAACA GCAG ATTTTCA
                     TGTCTTGT TGTC TAAAAGT
                         CC CC
GAM3623 LOC91409 3' AAACAAGCTTTATTTTC
                                   82021
                                            AGAAC
                     GAACAAGC TATTTTC
                     TTTGTTCG ATAAAAG
                         AA
GAM3624 PLAG1 3' GCATTGGCAATACTTATT 82025
                     GCATTGGTAATACTTATT
                     1111111111111111111
                     CGTAACCGTTATGAATAA
GAM3624 SIAT1 3' GCATTGGGCACAATTGTAATT 82026
                                             TAA TT
                     GCATTGG TAC ATTGTAATT
                     CGTAACC GTG TAACATTAA
                        C__ T_
             3' GCATTGGTAATAAATACT 82027
                                             CT
GAM3624 ESDN
                     GCATTGGTAATA TATT
                     CGTAACCATTAT ATGA
                          TT
GAM3624 ZMPSTE24 3' GCGTTGGCAATGTTTAATGT 82028 A
                                                AC T
                     GC TTGGTAAT TTA TGT
                     11 11111111 111 111
                     CG AACCGTTA AAT ACA
                          CA T
                                           _ C GAAA
GAM3625 ACE2
             3' GCCATTCTCAATCCTTGCAGCT 82031
                     GC ATTC CGA TTGCAGCT
                     CG TAAG GTT AACGTCGA
                      G A AGG_
GAM3625 NEBL
             3' GCATTCCCAGGAATATAC 82032
                                            A AT
                     GCATTCCCG GAA TGC
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GTC TTGTC GGTAAAAG

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CGTAAGGGT CTT ATG
                        C AT
GAM3625 CAMKK2 3' GCATTCCCTGGAAGAAATC 82033
                     GCATTCCC GAGAAATT
                    CGTAAGGG TTCTTTAG
                        ACC
GAM3625 ChGn 3' TAGCATTCCTAGAAACT 82034
                                         CG
                    TAGCATTCC AGAAATT
                     ATCGTAAGG TCTTTGA
                        Α
GAM3625 DKFZP761I2123 5' TAGCACTTGAATTGCAGC 82035
                                              CCC GAA
                    TAGCATT GA ATTGCAGC
                    ATCGTGA CT TAACGTCG
GAM3625 FLJ12700 3' TAGCATTCCCAGAAAACAACT 82036
                                            G TT
                    TAGCATTCCC AGAAA GCAGCT
                    ATCGTAAGGG TCTTT TGTTGA
GAM3625 KIAA1199 3' TAGCACCAATGGGGAGTTGCAG 82037
                                              CCC AAA
                      TAGCATT GAG TTGCAGCT
        CT
                     ATCGTGG CTC AACGTCGA
                       TTACCC
GAM3625 KIAA1765 3' TTCCCGAGAAGCCAACT 82038
                                           ATTG
                    TTCCCGAGAA CAGCT
                    AAGGCTCTT GTTGA
                         CG
GAM3625 RNF9 3' TAGCAGTTTCTGAGCCCACAGC 82039
                                           __ CC AAA TG
        Т
                     TAGCA TTC GAG T CAGCT
                     11111 111 111 1 11111
                    ATCGT AAG CTC G GTCGA
                      CA A_ G_ GT
GAM3625 ZNF313 3' GCTTCTCGGCATCTGCAGCT 82040 A C AGAAA
                     GC TTC CG TTGCAGCT
                     CG AAG GC GACGTCGA
                     _ A CGTA
GAM3625 LOC222112 5' TAGCATCCTGGGAGGCATCG 82041 CC_ AA
                    TAGCATTC GAG ATTG
                     ATCGTAGG CTC TAGC
                        ACC CG
GAM3625 LOC254544 5' ATTCCCGAGCCGCGC
                                   82042
                                            AAA A
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ATTCCCGAG TTGC GC

TAAGGGCTC GGCG CG ___ C GAM3626 AARS 3' TATCTATAGATGCGAGCGTGA 82045 AACT T C TGTCTATA CGA GCG GA ATAGATAT GCT CGC CT CTAC _ A GAM3626 SLC21A2 3' TGTTCATAAACTCAGCTGA 82046 C AT GC TGT TATAAACTCG GC GA ACA GTATTTGAGT CG CT Α GAM3626 CAPN6 3' ACTGTCTAGGACTCATTG 82047 TAA A ACTGTCTA ACTCG TG TGACAGAT TGAGT AC CC A GAM3626 DKFZP434L0117 3' ACTGGTTATAAACTTTATG 82048

TC CG

TGAC ATATTTGA TAC

CA AA

ACTG TATAAACT ATG

GAM3626 FLJ20340 3' CTGCTATAAACAGTCATGTGCG 82049 T __ G C CTG CTATAAAC TC ATG GCGA

GAC GATATTTG AG TAC CGCT

TC _ A

GAM3626 TSPAN-5 3' ACTGTCCATAAATTCATG 82050 CGACTGTCTATAAA TC ATG

TGACAGGTATTT AG TAC

GAM3626 LOC150157 5' ACTTTCTATAAACCGTCCCG 82051 G T ATG ACT TCTATAAAC CG CG

TGA AGATATTTG GC GC

_ AGG Α

GAM3626 LOC201564 3' ACTGTCTAAAGATGGACA 82052 TAAACTC C

> ACTGTCTA GATG GCG

TGACAGAT CTAC TGT

TT____ C

GAM3627 GTF2H1 3' TTCTGACAAAATTCTGCA 82055 A **CTAC**

TTC TGACAAAATTC TGTA

AAG ACTGTTTTAAG ACGT

GAM3627 SEPP1 3' GACAAATCCGTACTGTAT 82056 AT _ GACAAA TCC TACTGTAT

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CTGTTT AGG ATGACATA
                       __ C
GAM3627 SEPP1 3' GACAAATCCGTACTGTAT 82056
                                        ΑT
                    GACAAA TCC TACTGTAT
                    CTGTTT AGG ATGACATA
GAM3627 KIAA1742 3' TCCATGACAGGGTTCCGCGCCC 82057
                                             AAA TA
        TGT
                     TTCATGACA TTCC CTGT
                    AGGTACTGT AAGG GACA
                        CCC CGCGG
GAM3627 LIN-7-C 3' ATGACAAAATCTGCA
                               82058
                                        TCCTA
                    ATGACAAAAT CTGTA
                    TACTGTTTTA GACGT
GAM3627 RFX4 3' GACAAGGTCTCACTGTAT 82059 AAT C
                    GACAA TC TACTGTAT
                    CTGTT AG GTGACATA
                      CC_ A
GAM3627 LOC165771 5' TTCATGGAGCTCCTACTGT 82060
                                           ACAAAA
                    TTCATG TTCCTACTGT
                    AAGTAC GAGGATGACA
                      CTC
GAM3627 LOC203547 3' TTCATGTGAAATTCCTCAGT 82061
                                           ACA
                                                 ACT
                    TTCATG AAATTCCT GT
                    AAGTAC TTTAAGGA CA
                           GT_
                       AC_
GAM3627 LOC257449 3' TCCATGACAGGGTTCCGCGCCC 82057
                                             AAA TA
        TGT
                     TTCATGACA TTCC CTGT
                    AGGTACTGT AAGG GACA
                        CCC CGCGG
GAM3628 GNAS
             3' CTGCTGTTTTATTTATTTTTAC 82064
                                           GTAAGT
        Т
                     TTGCTGTTT
                               TTTTTACT
                    GACGACAAA AAAAATGA
                        ATAAAT
GAM3628 GNAS
             3' CTGCTGTTTTATTTATTTTAC 82064
                                           GTAAGT
        Т
                     TTGCTGTTT
                               TTTTTACT
                    GACGACAAA
                              AAAAATGA
                       ATAAAT
GAM3628 GNAS
             3' CTGCTGTTTTATTTATTTTAC 82064
                                           GTAAGT
```

TTGCTGTTT

TTTTTACT

Т

```
GACGACAAA
                                AAAAATGA
                         ATAAAT
GAM3628 GNAS
            3' CTGCTGTTTTATTTATTTTAC 82064
                                             GTAAGT
         Т
                      TTGCTGTTT
                                 TTTTTACT
                     GACGACAAA
                                 AAAAATGA
                         ATAAAT
GAM3628 PUM1
             3' TTGTTTTTGTTTGTTTTTACT 82065
                                          CTG AA
                      TTG TTTGT GTTTTTTACTA
         Α
                     AAC AAACA CAAAAAATGAT
                      AA AA
GAM3628 AK000009 3' TTCCTGTTTGTCTGATTTTTA 82066
                                                AAGT
                     TT CTGTTTGT TTTTTA
                     AA GACAAACA AAAAAT
                      G
                          GACT
GAM3628 DREV1 3' CTGTTTTTTTTTTTACT 82067
                                          GTAAG
                     CTGTTT TTTTTACT
                     GACAAA AAAAAATGA
                        AAA
GAM3628 RIS1
            3' TGTTTTGTATTTTTTTACTA 82068
                                          AG
                     TGTTT GTA TTTTTTACTA
                     ACAAA CAT AAAAAATGAT
                       A AA
GAM3628 LOC253461 3' TTGCTGTTTTTTAC
                                  82069
                                           GTAAGTT
                     TTGCTGTTT
                                 TTTTAC
                     AACGACAAA
                                 AAAATG
GAM3629 ABCA1 5' CCGTGGCTGGTCATTAACTGTT 82072 CCA CTA
                     CC GCTG TCAT AACTGTT
                     GG CGAC AGTA TTGACAA
                      CAC C__ A
GAM3629 ASH1
             3' CCTCAGCTACTGTTTCTGTT 82073 C
                                              ATCATAA
                     CC CAGCTGCT
                                   CTGTT
                     GG GTCGATGA
                                   GACAA
                          CAAA
                      Α
GAM3629 ATP1A1 5' CCCGGGCTGCTACCGCTGTT 82074
                                            CA
                                                  ATAA
                     CCC GCTGCTATC CTGTT
                     GGG CGACGATGG GACAA
                      CC
                            \mathsf{C}_{\scriptscriptstyle{-}}
GAM3629 CD80
             3' GCCAGCCATCTTGTAACTGTT 82075
                                             Α_
                     GCT GCTATC TAACTGTT
```

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AAC
                      Т
GAM3629 G6PD 3' CCCAGCTGCTGCGTCTGCT 82076
                                           ATCATAA
                     CCCAGCTGCT CTGTT
                     GGGTCGACGA GACGA
                         CGCA
GAM3629 ID4 3' CCACTAGCTATAACTGT 82077 G _ TCA
                     CCA CT GCTA TAACTGT
                     GGT GA CGAT ATTGACA
                      Т
GAM3629 OPHN1 5' GCTCCTTCCTCAACTGTT 82078
                                         GAA
                     GCT CT TC TAACTGTT
                     CGA GA GG GTTGACAA
                      GAA
GAM3629 SCN3A 3' CAGGCACATAACTGTT 82079
                                       CT TAT
                     CAG GC CATAACTGTT
                     GTC CG GTATTGACAA
                      __ T__
GAM3629 TCF2
            3' CAGTGTCCCATAACTGTT 82080
                                        C CTA
                     CAG TG TCATAACTGTT
                     GTC AC GGTATTGACAA
                      AG
GAM3629 DKFZP667O116 3' CCCCAGCTGCTGTCTGCACT 82081 A ATA
                     CCCCAGCTGCT TC ACT
                     GGGGTCGACGA AG TGA
                         C ACG
GAM3629 KIAA0014 3' ACCCCAACTGCACAGGCTGTT 82082
                                              TAT TAA
                     ACCCCAGCTGC CA CTGTT
                     TGGGGTTGACG GT GACAA
                         T__ CC_
GAM3629 KIAA0182 3' CCAGCTGCCAGCAAGCTGTT 82083
                                            T TAA
                     CCAGCTGCTA CA CTGTT
                     GGTCGACGGT GT GACAA
                         C TC_{-}
GAM3629 KIAA0565 5' CCTAAGCTGTCTATAACTGTT 82084 CC _ TCA
                     CC AGCTG CTA TAACTGTT
                     GG TCGAC GAT ATTGACAA
                     \mathsf{AT} \quad \mathsf{A} \quad \_
GAM3629 KIAA1822 3' CCCTATTCTATGTAACTGTT 82085
                                          AGCTG CA
```

CCC CTAT TAACTGTT

CGG CGGTAG ATTGACAA

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GGG GATA ATTGACAA
                      ATAA_ C_
GAM3629 TRIM6 3' CCTAGTACTGAGTAACTGTT 82086 C C ATCA
                    CC AG TGCT TAACTGTT
                    GG TC ATGA ATTGACAA
                     A _ CTC_
GAM3629 LOC123523 3' ACTCCAGCTGCTGGCACTGCC 82087 C ATCATA
                    AC CCAGCTGCT ACTGTT
                    TG GGTCGACGA TGACGG
                         CCG
                     Α
GAM3629 LOC145902 3' ACTCCAGCTGCTGGCACTGCC 82087
                                                ATCATA
                    AC CCAGCTGCT ACTGTT
                    TG GGTCGACGA
                                  TGACGG
                         CCG
GAM3629 LOC150407 3' ACCCCAGCTGCGAGCTGT 82088
                                             TATCATAA
                    ACCCCAGCTGC
                                  CTGT
                    IIII
                    TGGGGTCGACG
                                  GACA
                         CTC
GAM3629 LOC154739 5' CATTGCTATCACACAGTT 82089
                                        GC ACT
                    CA TGCTATCATA GTT
                    GT ACGATAGTGT CAA
                     Α
                          GT
GAM3629 LOC253868 3' CCCAGCTGTCCAGCTGT 82090
                                           TCATAA
                    CCCAGCTG CTA
                                  CTGT
                    GGGTCGAC GGT
                                  GACA
                       A C_{-}
GAM3629 LOC256207 5' CCTAAGCTGTCTATAACTGTT 82084 CC TCA
                    CC AGCTG CTA TAACTGTT
                    GG TCGAC GAT ATTGACAA
                     AT A ___
GAM3629 LOC93587 3' ACCACAGCTGCTAAGAGCTGTT 82091
                                            С
                                                TCATAA
                    ACC CAGCTGCTA CTGTT
                    TGG GTCGACGAT
                                   GACAA
                          TCTC__
                     Τ
GAM3630 GNAI1 3' ACAAGTATACATATAATC 82094
                                       TTG
                    ACA GTACATATAATC
                    TGT TATGTATATTAG
                     TCA
GAM3630 GRM6
             3' CACTGGAACATATAATTCA 82095
                                              C
                    CATTGG ACATATAAT CA
```

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GTGACC TGTATATTA GT
                      T
                          Α
GAM3630 MAN1A1 3' TAACTAGTATATAATCC 82096 C
                                          CA
                    A ATTGGTA TATAATCC
                    A TGATCAT ATATTAGG
                    Т
GAM3630 PCSK2 3' TGGCATTGGTAGTAAAATATCC 82097 A CATATA
                    TG CATTGGTA ATCCA
        Α
                    AC GTAACCAT TAGGT
                     С
                        CATTTTA
GAM3630 PIK3R1 3' ATTGATACAAATCCA
                               82098
                                       TAT
                    ATTGGTACA AATCCA
                    TAACTATGT TTAGGT
GAM3630 SLC20A2 3' TGACATTGGAGACAAGGATCC 82099
                                           T TATA
                    TGACATTGG ACA ATCC
                    ACTGTAACC TGT TAGG
                       TC TCC_
GAM3630 SLC4A4 3' TAACACAATAACATATAATTCA 82100
                                          TGGT C
                    TGACAT ACATATAAT CA
                    ATTGTG TGTATATTA GT
                      TTAT
GAM3630 BAG5 3' TGACATTGGTAACCCGTCTCCA 82101
                                            ATATAA
                    TGACATTGGTA C TCCA
                    ACTGTAACCAT G AGGT
                        T GGCAG
GAM3630 CPSF2 3' TGCATTAACACTATAATC 82102 A GG A
                    TG CATT TAC TATAATC
                    AC GTAA GTG ATATTAG
```

GAM3630 FLJ14686 3' ACATGATATATCC 82104 T CA
ACAT GGTA TATAATCC
|||| ||| ||||||
TGTA CTAT ATATTAGG

GAM3630 FLJ20130 3' TGACATTGTGTGCATGCTCC 82105 _ A ATAA TGACATTG GT CAT TCC |||||||| || |||

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A C CG
GAM3630 GDAP2 3' TAACAAGTCATATAATCCA 82106
                                         TT A
                    TGACA GGT CATATAATCCA
                    ATTGT TCA GTATATTAGGT
GAM3630 KIAA0332 3' CAATTATACATATAATCCA 82107 TTG
                    CA GTACATATAATCCA
                    GT TATGTATATTAGGT
                     TAA
GAM3630 KIAA0493 5' GACATTGGTACATCC
                                 82108
                                           TATAA
                    GACATTGGTACA TCC
                    CTGTAACCATGT AGG
GAM3630 KIAA1309 3' TGTACATTTACTATAATCCA 82109 _ GG A
                    TG ACATT TAC TATAATCCA
                    AC TGTAA ATG ATATTAGGT
                     Α __ _
GAM3630 KIAA1432 5' TGACACTGGTGTAATAAATCCA 82110
                                          ACATAT
                    TGACATTGGT AATCCA
                    ACTGTGACCA
                               TTAGGT
                        CATTAT
GAM3630 KIAA1500 3' TGACTGAAATATAATCC 82111 AT TAC
                    TGAC TGG ATATAATCC
                    ACTG ACT TATATTAGG
                      ___ T___
GAM3630 KIAA1718 3' TGACATTGTAAATTATAATCCA 82112
                                           GTACA
                    TGACATTG TATAATCCA
                    ACTGTAAC ATATTAGGT
                        ATTTA
GAM3630 MGC5149 3' TGACATTAGTACAAGCAGTC 82113
                                              TA A
                    TGACATTGGTACA TATC
                    ACTGTAATCATGT GT AG
                          TC C
GAM3630 NETO2 3' TGACAATGGTACATATATCCCA 82114
                                           Т
                                                Α
                    TGACA TGGTACATATA TCCA
                    ACTGT ACCATGTATAT GGGT
                      Т
GAM3630 Rpo1-2 3' TGGCATTGGTACATGTTCC 82115 A
                                             ATAA
                    TG CATTGGTACAT TCC
```

ACTGTAAC CA GTA AGG

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AC GTAACCATGTA AGG
                     С
                          CA
GAM3630 LOC145837 5' CATGTTGGTACAGGTACTCCA 82116 TA A
                    CAT TGGTACA TA TCCA
                    GTA ACCATGT AT AGGT
                      CA
                          CC G
GAM3630 LOC151194 3' ACATTGGTATAATACC
                                          CATA _
                                  82117
                    ACATTGGTA TAAT CC
                    TGTAACCAT ATTA GG
                        Т
GAM3630 LOC151465 3' GACATTGAACACTATGATC 82118
                                            T _ A
                    GACATTGG ACAT AT ATC
                    CTGTAACT TGTG TA TAG
                        A C
                                         T AT
GAM3630 LOC159250 5' ATTGGTACAGACACCA 82119
                    ATTGGTACA ATA CCA
                    TAACCATGT TGT GGT
                        C __
GAM3630 LOC169026 3' ACTGATCAGTATATAATCCA 82120
                                            AC
                    ATTGGT ATATAATCCA
                    TGACTA TATATTAGGT
                       GTCA
GAM3630 LOC202050 3' TAACATTGGTACAAGTCTC 82121
                                           TATAA
                    TGACATTGGTACA TC
                    ATTGTAACCATGT AG
                         TCAG
GAM3630 LOC256942 3' TGGCTCACGTATAATCCA 82122
                    TGGT AC TATAATCCA
                    ACCG TG ATATTAGGT
                      AG C
GAM3630 LOC90693 3' CATAGGATATAATCCA
                                 82123 T TAC
                    CAT GG ATATAATCCA
                    GTA CC TATATTAGGT
                     Τ_
GAM3631 IL1A 3' TGTAAACATTCATTTAGAA 82126
                                        C ATGCG
                    TGTAA ACA CATTTAGAA
                    ACATT TGT GTAAATCTT
                      _ AA_
GAM3631 ITGA2 3' ACACAATGCAAATTAGAAT 82127
                                           CAT
```

ACACAATGCG TTAGAAT

```
TGTGTTACGT AATCTTA
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GAM3631 PAIP2 3' TGTAACACAGTGACAAGA 82128 A C TTT

TGTAACACA TG GCA AGA

ACATTGTGT AC TGT TCT

C _ __

GAM3631 SORCS1 3' TGCAACACTTCTATATTTAGAA 82129 AATGCGC

T TGTAACAC ATTTAGAAT

ACGTTGTG TAAATCTTA

AAGATA

GAM3631 ZNF10 3' TGTGACCCAAAACAATTTAGAA 82130 A A T C

T TGT AC CAA GCG ATTTAGAAT

ACA TG GTT TGT TAAATCTTA

CGT

GAM3631 FLJ13611 3' GTAACACATGATTTAGA 82131 A CGC

GTAACACA TG ATTTAGA

CATTGTGT AC TAAATCT

GAM3631 MDS029 3' TGCAATATACCACATTTAGAAT 82132 CACA _

TGTAA ATGC GCATTTAGAAT

ACGTT TATG TGTAAATCTTA

A G

GAM3631 OMD 3' TGGAACACAATAACATTGTTTA 82133 T C ___

G TG AACACAATG GCATT TAG

AC TTGTGTTAT TGTAA ATC

C _ CAA

GAM3632 PMX1 3' GCTTTAATGAAAACTTCGT 82136 C CCATC

GCT TTAA AAAACTTCGT

CGA AATT TTTTGAAGCA

_ AC___

GAM3632 PMX1 3' GCTTTAATGAAAACTTCGT 82136 C CCATC

GCT TTAA AAAACTTCGT

CGA AATT TTTTGAAGCA

_ AC__

GAM3632 RAD50 3' GCTCTTAATCTTACTCGT 82137 ACC AAA T

GCTCTTA ATC ACT CGT

CGAGAAT TAG TGA GCA

___ AA_ _

GAM3632 RAD50 3' GCTCTTAATCTTACTCGT 82137 ACC AAA T

GCTCTTA ATC ACT CGT

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__ AA_ _
GAM3632 KIAA1257 3' GCTTTCAATCATCAAAAC 82138
                                         CC
                     GCT TTAA CATCAAAAC
                     CGA AGTT GTAGTTTTG
                      A A
GAM3633 APBA1
             3' TGGGTCAGTACCAGGTGGGTGC 82141 A _ T A A
         TGG
                       TG GTCGG ATTA GTG GT CTGG
                     AC CAGTC TGGT CAC CA GACC
                      CACCC
GAM3633 C5orf4 3' TGAGTCGGGTATGTGAA 82142
                                          ΑT
                     TGAGTCGG TATGTGAG
                     ACTCAGCC ATACACTT
                        С
GAM3633 C5orf4 3' TGAGTCGGGTATGTGAA 82142
                                          AΤ
                     TGAGTCGG TATGTGAG
                     ACTCAGCC ATACACTT
                        C_{-}
GAM3634 STK18 3' TTCTATTTTATATCCACTATAT 82145
         TT
                      TTTTATTTTATATT TTATATTT
                     AAGATAAAATATAG GATATAAA
                          GT
GAM3634 WNT5A 3' TTTTATTTTATATTCTAT 82146
                     TTTTATTTTAT
                     AAAATAAAATATAAGATA
GAM3634 FLJ23516 3' TATTTTATTTACATTTTATATT 82147
         Т
                     TATTTTATTT ATATTTTATATTT
                     ATAAAATAAA TGTAAAATATAAA
GAM3634 MGC4832 3' CATTTTATTTTACATTATAT 82148
                                               Τ
                     TATTTTATTTTATATT TAT
                     GTAAAATAAAATGTAA ATA
GAM3635 F3
           3' TAAAGTGCAGATTGTAAAGCA 82151
                                           ATAC _
                     TAAAGTGCA TGTAA GCG
                     ATTTCACGT ACATT CGT
                        CTA_ T
GAM3635 FCMD
             3' AAGTGCAATGCCGCGA
                                  82152
                                           A GTAA
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AAGTGCAAT CT GCGA

CGAGAAT TAG TGA GCA

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TTCACGTTA GG CGCT
                        C ____
GAM3635 DRIL2 3' GTGAGCCGCAAGCGAAT 82153 CAATA
                    GTG CTGTAAGCGAAT
                    CAC GGCGTTCGCTTA
                     TC
GAM3636 P23 3' TGCCTTAGCTGACTTAAAAT 82156
                                        C GT
                    TGCC TAGCTGAC GGGT
                    ACGG ATCGACTG TTTA
                      Α
                          AAT
GAM3636 SERPINF2 3' TGTCCCAGCTGACGTGGG 82157 C
                    TG CCTAGCTGACGTGGG
                    AC GGGTCGACTGCACCC
                                          CTGA _ T
GAM3636 TCF3 3' TGCCCTAGTTCGTGTGGAACT 82158
                    TGCCCTAG CGTG GG ACT
                    ACGGGATC GCAC CC TGA
                        AA__ A T
GAM3636 FLJ12787 3' CTTACTTAAAACGGGTACT 82159 A CG
                    CT GCT GA TGGGTACT
                    GA TGA TT GCCCATGA
                     A A TT
GAM3636 MGC12981 3' TGCCCAGCTACTCAGGT 82160 T ACG
                    TGCCC AGCTG TGGGT
                    ACGGG TCGAT GTCCA
                       _ GA_
GAM3636 STK29 3' TGTCCTTGCCCGTTGGGTACTC 82161 C A GA _
        G
                     TG CCT GCT CGT GGGTACTCG
                    AC GGA CGG GCA CCCATGAGC
                     A A __ A
GAM3636 LOC144486 3' TGTCCTAGTGATGGACACT 82162 C C CG GT
                    TG CCTAG TGA TGG ACT
                    11 11111 111 111 111
                    AC GGATC ACT ACC TGA
                     A _ _ TG
GAM3636 LOC146745 5' GCCGCGACGTGGGTACT 82163 CTA T
                    GCC GC GACGTGGGTACT
                     CGG CG CTGCACCCATGA
GAM3636 LOC152084 3' GCTGCAGCTACGTGGGT 82164 CC
                                             Α
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GC TAGCTG CGTGGGT

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CG GTCGAT GCACCCA
                     AC
GAM3636 LOC152924 3' TGCCTTAGCTGACTTCAAAT 82165
                                           С
                                               G GG
                    TGCC TAGCTGAC T GT
                    ACGG ATCGACTG G TA
                          AA TT
GAM3636 LOC201243 5' GCCGCGACGTGGGTACT 82163
                                        CTA T
                    GCC GC GACGTGGGTACT
                    CGG CG CTGCACCCATGA
GAM3636 LOC56920 3' TGCCCTAGCTGGGTGGGT 82166
                                             AC
                    TGCCCTAGCTG GTGGGT
                    ACGGGATCGAC CACCCA
GAM3637 CYBB 3' GAAGATAGAAAACCTTG 82169
                                         TAAAT
                    GAAGATA AGGATCTTG
                    CTTCTAT TTTTGGAAC
                       С
GAM3637 IGFBP3 3' GAAGACATAAACATTCTTCTTG 82170
                                              GGA
        G
                     GAAGATATAAATA TCTTGG
                    CTTCTGTATTTGT AGAACC
                         AAGA
GAM3637 FLJ13189 3' GAAGAATGAGTAGAATCTGG 82171
                                           TATAAA
                    GAAGA TAGGATCT GG
                    CTTCT ATCTTAGA CC
                      TACTC
GAM3637 FLJ14054 3' GAAGATTTTCAGATCTTGG 82172
                                          ATAAATA
                    GAAGAT GGATCTTGG
                    CTTCTA TCTAGAACC
                       AAAG__
GAM3637 KIAA1571 3' GAAGATCCAGGATCTTG 82173
                                          ATAAA
                    GAAGAT TAGGATCTTG
                    CTTCTA GTCCTAGAAC
                       G
GAM3637 MSTP028 3' GAAAATATAAACTCGTTTTTGG 82174
                                              AGGATC
                    GAAGATATAAAT TTGG
                    - 1111
                    CTTTTATATTTG AACC
                         AGCAAA
GAM3638 BECN1 3' ATAAAGTGGCTTTTGTGGA 82177
                                            CTC C
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ATAAAGTGGCT GT GA

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AAA C
             3' AGGGGCTCTCCAACAAT 82178
                                        Т
                                             GT
GAM3638 CD8A
                     AG GGCTCTC CGACAAT
                     TC CCGAGAG GTTGTTA
                      С
GAM3638 MEN1
             5' AAATGGCTTTTGCAAAACAAT 82179
                                             CTC C_
                     AAGTGGCT GT GACAAT
                     TTTACCGA CG TTGTTA
                         AAA TT
GAM3638 T2BP
             3' TAAAGTGGCCCAAGAACA 82180
                                             TCGTC
                     TAAAGTGGCTC GACA
                     ATTTCACCGGG
                                  TTGT
                          TTC_
GAM3638 LOC200081 3' TATAGAATGGCTCTACACA 82181
                                                 Т
                     TATA AGTGGCTCT CG CG
                     ATAT TTACCGAGA GT GT
                       С
                            Τ_
GAM3639 ASB3
             3' AGAAGTAACATCACAGTT 82184
                                         TA
                     AGA GACATCACAGTT
                     111 111111111111
                     TCT TTGTAGTGTCAA
                      TCA
GAM3639 B4GALT5 3' CAGATCACAGTTCATCA 82185
                                           CA
                                                 С
                     TAGA TCACAGTTCA CA
                     GTCT AGTGTCAAGT GT
GAM3639 CADPS 3' AGACATGGACATCAGGAAATCA 82186
                                             GA
                                                   CAGT
                     AGA AT GACATCA TCA
                     TCT TA CTGTAGT
                                    AGT
                      GC
                            CCTTT
GAM3639 DAAM2
              3' GAGATAGATAGTCACAGTTCCC 82187
                                               CA_
         CA
                       GAGATAGA TCACAGTTC CCA
                     CTCTATCT AGTGTCAAG GGT
                         ATC
GAM3639 DNTT
             3' AGAGATAGACAGTATTTCAGCT 82188
                                               TCA___
                     AGAGATAGACA
                                   CAGTT
                     IIIII
                     TCTCTATCTGT
                                  GTCGA
                          CATAAA
GAM3639 DUSP5
              3' AGAGACAGACATTGAAACTGCC 82189
                                                 CACAGTTCA
                      AGAGATAGACAT
         Α
                                      CCA
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TATTTCACCGA CA CT

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TCTCTGTCTGTA
                                  GGT
                         ACTTTGAC_
                                         T C
GAM3639 FACL3 3' AGAGACAGACACAAGTT 82190
                    AGAGATAGACA CA AGTT
                    TCTCTGTCTGT GT TCAA
GAM3639 GNGT2 3' AGAGAAGGTGACAGTTCAC 82191
                                         T ACATC
                    AGAGA AG ACAGTTCAC
                    TCTCT TC TGTCAAGTG
                      CAC
GAM3639 HDAC4 3' AGAGAGACAGGCAGTTCAC 82192
                                         TA TCA
                    AGAGA GACA CAGTTCAC
                    TCTCT CTGT GTCAAGTG
                       CC
GAM3639 HTR2C 3' AGGGACAGACATTGCAGTAAAT 82193 A CA TC
        ACCA
                      AG GATAGACAT CAGT ACCA
                    TC CTGTCTGTA GTCA TGGT
                     С
                         AC TTTA
GAM3639 KCNA6 3' AGAACAGTACATCACAGTT 82194 G _
                    AGA ATAG ACATCACAGTT
                    TCT TGTC TGTAGTGTCAA
GAM3639 MLLT2 3' AGAGATAAGCATCGCTCCC 82195
                                        GA ACA A
                    AGAGATA CATC GTTC CC
                    TCTCTAT GTAG CGAG GG
                       TC
GAM3639 RNF28 3' AGAGAAGACATCACCTCCCCA 82196 T
                                              AG A
                    AGAGA AGACATCAC TTC CCA
                    TCTCT TCTGTAGTG AGG GGT
                          G_ _
GAM3639 SACM1L 3' AGAGATAGACTTTACATTC 82197
                                           ATC G
                    AGAGATAGAC ACA TTC
                    TCTCTATCTG TGT AAG
                        AAA _
GAM3639 SERPINE1 3' GAGACAGATCTGGTTTACCA 82198
                                            CA ACA C
                    GAGATAGA TC GTT ACCA
                    CTCTGTCT AG CAA TGGT
                       __ AC_ A
GAM3639 SIAT1 3' AGAGATAGACCTTGCATCTACC 82199
                                            ATCACA TC
                    AGAGATAGAC GT ACCA
        Α
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GAACG GA
GAM3639 SLC26A4 3' AGAGACAGTATTCCCGCAGTT 82200
                                            ACA A
                    AGAGATAG TC CAGTT
                    TCTCTGTC GG GTCAA
                        ATAAG C
GAM3639 STAU2 3' AGAGATAGATGCACCTAATCA 82201
                                            CAT AGT_
                    AGAGATAGA CAC TCA
                    TCTCTATCT GTG AGT
                        AC GATT
GAM3639 AKAP6 3' AGGGATAGATGTCACCATGTCA 82202 A
                                             CA AGT
                    AG GATAGA TCAC TCA
                    TC CTATCT AGTG AGT
                        AC GTAC
                                          AC __
GAM3639 ARL8 3' AGACAGTATCTTACAGTTCAC 82203
                    AGATAG ATC ACAGTTCAC
                    TCTGTC TAG TGTCAAGTG
                       A_{-} AA
GAM3639 CL25084 3' AGGGATAGACAGCACAGT 82204 A
                                            Т
                    AG GATAGACA CACAGT
                    TC CTATCTGT GTGTCA
                     С
GAM3639 DDX34 3' AGGGATGCGGACGCAGTTCACC 82205 A A_ ATCA
                     AG GAT GAC CAGTTCACCA
        Α
                    TC CTA CTG GTCAAGTGGT
                     C CGC C_
GAM3639 DKFZP434P211 3' AGGTAGACATCATTTTCA 82206 A
                                                CAG
                    AG TAGACATCA TTCA
                    TC ATCTGTAGT AAGT
                         AA_
                     С
GAM3639 FLJ10139 3' AGAGATAGGTACTGAACAAACC 82207
                                             __ ATC TTC
                     AGAGATAG AC ACAG ACCA
                    TCTCTATC TG TGTT TGGT
                        CA ACT
GAM3639 FLJ20154 5' GAGTTGGAGGTCGGTTCACCA 82208
                                           ATA CA ACA
                    GAG GA TC GTTCACCA
                    CTC CT AG CAAGTGGT
                     AAC CC C_
GAM3639 FLJ30046 5' GAGATAGAATCATCCTCC 82209
                                           C CAG A
                    GAGATAGA ATCA TTC CC
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TCTCTATCTG TA TGGT

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CTCTATCT TAGT AGG GG
                        _ __ A
GAM3639 IRAK3 3' GAGAGGACATTACAATCCA 82210
                                         TA C
                     GAGA GACAT ACAGTTCA
                     CTCT CTGTA TGTTAGGT
                      C_ A
GAM3639 KIAA0144 3' AGAAATACCACAGTT
                                         AGAC
                                 82211
                     AGAGAT ATCACAGTT
                     111111 111111111
                     TCTTTA TGGTGTCAA
GAM3639 KIAA0212 3' AGAGATAGAGATGGCACGTT 82212
                                            C __ A
                     AGAGATAGA AT CAC GTT
                     TCTCTATCT TA GTG CAA
                        C CC
GAM3639 KIAA1530 3' AGCAGATGACTGAACGGTTCAC 82213 A ATC A
                     AG AGAT GAC AC GTTCAC
                     TC TCTA CTG TG CAAGTG
                     G _ ACT C
GAM3639 KLHL8 3' AGAAATAGACATTGAAGCC 82214
                                             CAC
                     AGAGATAGACAT AGTT
                     TCTTTATCTGTA TCGG
                         ACT
GAM3639 LIPG 3' AGAGATAGACTTTGCCTCC 82215
                                          ATCACA CA
                     AGAGATAGAC GTT CC
                     TCTCTATCTG CGG GG
                        AAA___ A_
GAM3639 MEGF10 3' AGAGATAGAAAATTCA
                                82216
                                          CATCAC
                     AGAGATAGA AGTTCA
                     TCTCTATCT
                               TTAAGT
                        Т
GAM3639 MGC13523 3' AGAGATAACATCACAATT 82217
                     AGAGAT GACATCACAGTT
                     TCTCTA TTGTAGTGTTAA
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GAM3639 NALP2 3' AGAGGAGTCACAGGCAGTTCAC 82218 AT A CA_
CA AGAG AG CAT CAGTTCACCA

||| || || || ||| ||||||||

TCTC TC GTG GTCAAGTGGT

C_ A TCC

GAM3639 U5-100K 3' AAGATGGACACAGCCAGTTCAC 82219 A CA_
C GAGAT GACAT CAGTTCACC

|||| |||| ||||||||

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TTCTA CTGTG GTCAAGTGG
                       C TCG
GAM3639 LOC127733 3' GAGAGAATCACAGTTCAC 82220
                                           TA C
                     GAGA GA ATCACAGTTCAC
                     CTCT CT TAGTGTCAAGTG
GAM3639 LOC133634 5' AGAGGGGGACATCACTCCC 82221
                                            ATA AGT A
                     AGAG GACATCAC TC CC
                     TCTC CTGTAGTG AG GG
                      CCC
GAM3639 LOC145624 5' AGAGGAGGTATCACCCACC 82222
                                            AT AC
                                                  AGT
                     AGAG AG ATCAC TCACC
                     TCTC TC TAGTG GGTGG
                      C CA
GAM3639 LOC148229 5' GAGAGGACATCACGCT 82223
                                          TA A
                     GAGA GACATCAC GTT
                     CTCT CTGTAGTG CGA
                      \mathsf{C}_{-}
GAM3639 LOC202934 3' AGAGAAAGGCATCAAATC 82224 T A C
                     AGAGA AG CATCA AGTT
                     TCTCT TC GTAGT TTAG
                       T C
GAM3639 LOC221322 5' AGGATAGGATAACAAGTTCACC 82225 A ACAT C
                     AG GATAG CA AGTTCACCA
         Α
                     TC CTATC GT TCAAGTGGT
                      _ CTATT _
                                           T C GT
GAM3639 LOC221810 3' AGAGAAGACATTACATCA 82226
                     AGAGA AGACAT ACA TCA
                     TCTCT TCTGTA TGT AGT
                      _ A __
GAM3639 LOC253044 3' GAAATAGATATCTCAC 82227
                                           C ACAGT
                     GAGATAGA ATC TCAC
                     CTTTATCT TAG AGTG
                        Α.
GAM3639 LOC255465 3' AGAGAAAGGCATCAAGTC 82228
                                           TA C
                     AGAGA AG CATCA AGTT
                     TCTCT TC GTAGT TCAG
                       T C
GAM3639 LOC51696 3' GAGATAGTTAATTCACC 82229
                                           ACATCAC
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GAGATAG AGTTCACC

```
CTCTATC
                              TTAAGTGG
                        AA
GAM3639 LOC90231 3' GAGATGGACATCACCGCC 82230
                                                Α
                     GAGAT GACATCAC GTT
                     CTCTA CTGTAGTG CGG
                       C
                           G
GAM3640 FLJ13910 3' CAGTGTGTGTACACTAAC 82233
                                           CA
                     TAGTGTG TACACTAAT
                     GTCACAC ATGTGATTG
                        AC
GAM3640 KIAA1505 5' TAGTGTGCACACATAACTT 82234
                                              С
                     TAGTGTGCATACA TAATTT
                     ATCACACGTGTGT ATTGAA
GAM3640 OR51E2 3' GTGTACATTCAAAATTTTTGA 82235
                                             A CT
                                                   C
                     GTGTGCAT CA AATTTT GA
                     CACATGTA GT TTAAAA CT
                        A T_ A
GAM3641 CERD4 3' TGTACTTGAAGCCCCCACC 82238
                                            _T_
                     TGT CTTGG CTTCCACC
                     ACA GAACT GGGGGTGG
                      T TC
GAM3641 KCNE3
             3' TGTCTTGGTCTTCCACCG 82239
                                               Ш
                     TGTCTTGGTCTTCCACC G
                     ACAGAACCAGAAGGTGG C
                            Ш
GAM3641 MAT1A 3' TGCCTTAATTTCCTTTCACC 82240
                                              С
                     TGTCTTGGT CTT CACC
                     ACGGAATTA GAA GTGG
                        AAG A
            3' TGCCTTGGTCTGGTCACC 82241
GAM3641 RDS
                                            TC_
                     TGTCTTGGTCT CACC
                     ACGGAACCAGA GTGG
                         CCA
GAM3641 TNXB
             5' TGTCCTGCCGAGCCCACC 82242
                                           G T__
                     TGTCTTG TC TCCACC
                     ACAGGAC GG GGGTGG
                        _{-} CTC
GAM3641 FLJ22031 3' TGCCAGCCCCTTTCCACC 82243
                                          TT
                     TGTC GGTCT TCCACC
```

1111 11111 111111

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ACGG TCGGG AGGTGG
                         GAA
GAM3641 FLJ23185 3' TGCCCCGAGTCTTCTACC 82244
                                            С
                    TGTCTTG GTCTTC ACC
                    ACGGGGC CAGAAG TGG
                       T A
GAM3641 KIAA0628 3' TGCTAGTCCCTTTCCACC 82245
                                         CT
                    TGT TGGTCT TCCACC
                    ACG ATCAGG AGGTGG
                         GAA
GAM3641 KIAA1029 3' TGCCTTGGCCAAAGCCACC 82246
                                             TT
                    TGTCTTGGTC CCACC
                    ACGGAACCGG GGTGG
                        TTTC
GAM3641 KIAA1056 3' TGTCTGGCCCTCTTCCACC 82247
                                          Τ _
                    TGTCT GGTCT TCCACC
                    ACAGA CCGGG AGGTGG
                      _ AGA
GAM3641 KIAA1719 5' GTCTTGACTATTTCCACC 82248
                                          T
                    GTCTTGG CT TCCACC
                    CAGAACT GA AGGTGG
                       _ TAA
GAM3641 PRO1598 5' TGTCCTAGGCCCTCTTCCAC 82249
                    TGTCTTGG TCTTCCAC
                    ACAGGATC AGAAGGTG
                        CGGG
GAM3641 TNFSF13 5' TGCCTTGAGACCCTCCACC 82250
                    TGTCTTG G TCTTCCACC
                    ACGGAAC C GGGAGGTGG
                       TT
GAM3641 LOC125268 3' TGCCTTGGTTCCCTCACC 82251
                                            _ TC
                    TGTCTTGGT CT CACC
                    ACGGAACCA GG GTGG
                        A GA
GAM3641 LOC142954 3' TATCCTAACGTTTCCACC 82252
                                           TC_
                    TGTCTTGG TTCCACC
                    ATAGGATT AAGGTGG
                        GCA
GAM3641 LOC143310 5' TGTCTTGATGGTTCTTCCACC 82253
                    TGTCTTGG TCTTCCACC
```

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ACAGAACT AGAAGGTGG
                        ACCA
GAM3641 LOC148887 5' TGTCCTGGCCTGATCTGCC 82254
                                               CA
                     TGTCTTGGTCT TC CC
                     ACAGGACCGGA AG GG
                         CT AC
GAM3641 LOC255338 5' TGTCTCGGGTAGGCTCCACC 82255
                                              TC___
                     TGTCTTGG TTCCACC
                     ACAGAGCC GAGGTGG
                        CATCC
GAM3641 LOC255736 5' TGTCCTCCAGCCTTTCCACC 82256
                     TGTCTT GGTCTT CCACC
                     ACAGGA TCGGAA GGTGG
                       GG
                           Α
GAM3641 LOC257407 5' TGTCTTAGTAAGCCCCAC 82257
                     TGTCTTGGT TTCCAC
                     ACAGAATCA GGGGTG
                        TTC
GAM3641 LOC91548 5' TGTCCTGGTGGGTTCCACC 82258
                                              С
                     TGTCTTGGT TTCCACC
                     ACAGGACCA AAGGTGG
                        CCC
GAM3641 LOC92299 3' TGTCTCGATCTCTTCACC 82259
                                              С
                     TGTCTTGGTCTT CACC
                     ACAGAGCTAGAG GTGG
                          AA
GAM3642 GALNT7 3' TCTGCTTCACTCTTTAATT 82262
                                            Т
                     TCT TTTTA CTCTTTAATT
                     AGA GAAGT GAGAAATTAA
                      C _
GAM3642 HD
            3' TCCATTTTTTCCCTTTAATTT 82263
                                         C TA
                     TCTAT TTTT TCTCTTTAATTT
                     AGGTA AAAA AGGGAAATTAAA
GAM3642 KCNJ16 3' TCCTAATATCTCTTTGATT 82264
                                          TT
                                               Α
                     TCTT TATCTCTTT ATT
                     AGGA ATAGAGAAA TAA
                      TT
                            С
GAM3642 PRKCN 5' TCAGTCTGTACTTGTCTCTTTA 82265 TA T_ A
        ATTT
                       TC TCT TTT TCTCTTTAATTT
```

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AG AGA GAA AGAGAAATTAAA
                      TC CAT C
GAM3642 FLJ10508 3' TCTCTTTATCTCTTTAATTT 82266
                     TCTTTTTATCTCTTTAATTT
                     AGAGAAATAGAGAAATTAAA
GAM3642 KIAA1762 3' TCTTCTTTTTATCTTCTTT 82267
                                          Α
                     TCT TCTTTTTATCT CTTT
                     AGA AGAAAAATAGA GAAA
GAM3642 LOC145693 5' TATCTTCCCTCTTTA
                                   82268
                                           TTA
                     TATCTTT TCTCTTTA
                     ATAGAAG GGAGAAAT
GAM3642 LOC222193 3' TCTCTCTCTTTAATTT
                                   82269
                                          TTTA
                     TCTT TCTCTTTAATTT
                     AGAG AGAGAAATTAAA
GAM3642 LOC54505 5' TCTTTCTTTTTATCTTTCTCT 82270
                     TCT TCTTTTTATC TCTTT
                     AGA AGAAAAATAG AGAGA
                            AA
GAM3643 ADD1
             3' AGCACACGGTTCAGGCTCCA 82273
                                              ATACA T A
                     AGCACACG CA GT TCCA
                     TCGTGTGC GT CG AGGT
                         CAA__ C _
             3' AGCACACGGTTCAGGCTCCA 82273
                                              ATACA T A
GAM3643 ADD1
                     AGCACACG CA GT TCCA
                     TCGTGTGC GT CG AGGT
                         CAA__ C _
GAM3643 AHCY
             3' AAGCACACAGGTATAAGTCCA 82274
                                              ATACAC TA
                     AAGCACACG ATG TCCA
                      | | | | | | | | |
                     TTCGTGTGT TAT AGGT
                               _ TC
                         CCA_
GAM3643 CCRL1
             3' AAGCATCATTCATATGTATCCA 82275
                                             _ CGATA C
                     AAGCA CA CA ATGTATCCA
                     TTCGT GT GT TACATAGGT
                        A AA___ A
```

GAM3643 CKTSF1B1 3' AAACACACACACTATGT

82276

AAGCACAC ACAC ATGT

GAT _

```
TTTGTGTG TGTG TACA
                        ___ A
GAM3643 CRI1 3' AAGCACACGTGATACATAT 82277
                                         ATAC
                    AAGCACACG ACATGT
                    TTCGTGTGC TGTATA
                        ACTA
GAM3643 GRM6
             3' ACATTACACACGTGTATC 82278
                                        CG A
                    ACA ATACAC TGTATC
                     TGT TGTGTG ACATAG
                      AA
                         С
GAM3643 GTF2IRD1 3' GCATCGATACATATCC 82279
                                        CA
                                             CATG
                     GCA CGATACA TATCC
                     CGT GCTATGT ATAGG
GAM3643 HELLS 3' AAGTACACATCAGCCTGTATCC 82280 C ATACACA
        Α
                     AAG ACACG TGTATCCA
                     111 11111
                          TTC TGTGT
                               ACATAGGT
                      A AGTCGG_
GAM3643 MJD
            3' AGCACACGGTATACAGT 82281
                                         A C T
                    AGCACACG TA ACA GT
                     TCGTGTGC AT TGT CA
                        CA_
GAM3643 MJD
            3' AGCACACGGTATACAGT 82281
                                        A C T
                    AGCACACG TA ACA GT
                     TCGTGTGC AT TGT CA
                        CA_
GAM3643 MS4A8B 3' AGCACACGAATGTGTGTGCC 82282
                                             TACACA AT
        Α
                     AGCACACGA TGT CCA
                     TCGTGTGCT
                               ACA GGT
                        TACAC_ CAC
GAM3643 NT5C2 3' AGTACAGATACACAAAACCA 82283 C C
                                               TGTAT
                    AG ACA GATACACA CCA
                     TC TGT CTATGTGT GGT
                     Α _
                           \mathsf{TTT}_{\_}
GAM3643 NTSR1 3' AAGCACACGGAATGCGCACCC 82284
                                             ATACACA
```

CTTAC__
GAM3643 PLAG1 3' AAGTACACGATATACATG 82285 C C
AAG ACACGATA ACATG
||| ||||||| |||||

AAGCACACG

TTCGTGTGC

TGTATCC

GCGTGGG

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TTC TGTGCTAT TGTAC
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A A

GAM3643 PRAME 3' AAGCATTTGATATGTGCACCCA 82286 CAC CACA

AAGCA GATA TGTATCCA

TTCGT CTAT ACGTGGGT

AAA AC

GAM3643 RB1 3' AAGCACACAGTATATCAGATTC 82287 A CA_ T A

CA AAGCACACG TA CA GT TCCA

TTCGTGTGT AT GT TA AGGT

C ATA C $_$

GAM3643 SCN4A 3' AAGCACACATACATGT 82288 ATAC

AAGCACACG ACATGT

TTCGTGTGT TGTACA

Α

GAM3643 TPP2 3' GCACTTACACATGTATTCA 82289 ACGA C

GCAC TACACATGTAT CA

CGTG ATGTGTACATA GT

A A

GAM3643 APOA5 3' AGCACACAGTATGCTCCC 82290 ATACAC A

AGCACACG ATGT TCC

TCGTGTGT TACG GGG

CA A

GAM3643 BTBD3 3' AAGCACACTGATGCACAAGT 82291 A T

AAGCACAC GAT CACA GT

TTCGTGTG CTA GTGT CA

A C T

GAM3643 CAMKK1 3' AGCACGCGACATGCACCC 82292 A TACA

AGCAC CGA CATGTATCC

TCGTG GCT GTACGTGGG

C __

GAM3643 CHUK 3' AAGCACAGATACACAATCC 82293 C TGT

AAGCACA GATACACA ATCC

TTCGTGT CTATGTGT TAGG

GAM3643 FCGBP 3' AGCACATGATGCATCC 82294 C TACACA

AGCACA GA TGTATCC

TCGTGT CT ACGTAGG

Α _____

GAM3643 FLJ10350 3' AGCACACGAATGCAC 82295 TACAC

AGCACACGA ATGTAT

TCGTGTGCT TACGTG

GAM3643 FLJ23309 3' AAGCACATCATACACATG 82296 CG AAGCACA ATACACATG TTCGTGT TATGTGTAC AG GAM3643 FLJ32762 3' AAGCAATACCATGTATC 82297 CACG A AAGCA ATAC CATGTATC TTCGT TATG GTACATAG GAM3643 IMAGE145052 3' AACATACGATACAATC 82298 С CATGT AGCA ACGATACA ATC TTGT TGCTATGT TAG A ATGTA GAM3643 KIAA0390 3' AAGCACACGATCACCC 82299 AAGCACACGAT CAC TC TTCGTGTGCTA GTG GG GAM3643 KIAA0672 3' ACAACGATTTGTACATGTAT 82300 C AC GCA ACGAT ACATGTAT TGT TGCTA TGTACATA AACA GAM3643 KIAA1078 3' AAGCACACCATACACTGTAC 82301 G A AAGCACAC ATACAC TGTAT TTCGTGTG TATGTG ACATG G GAM3643 KIAA1449 3' AAGCACACTGTTGTATCC 82302 **GATACACA** AAGCACAC TGTATCC TTCGTGTG **ACATAGG** ACA_ GAM3643 LCE 3' AAACATTGACACATGTAT 82303 **CACGAT** AAGCA ACACATGTAT TTTGT TGTGTACATA AAC_ CG_ GAM3643 MAPK11 3' AAGCACATGTACACACATGT 82304 AAGCACA ATACACATGT TTCGTGT TGTGTGTACA ACA GAM3643 PSMD1 3' GCAACGATACATGCAT 82305 С CA GCA ACGATACA TGTAT

CGT TGCTATGT ACGTA

GAM3643 RTP801 3' ACATGCTACACACACATCCA 82306 CGA TG ACA TACACA TATCCA TGT ATGTGT GTAGGT ACG GT GAM3643 SYTL4 3' AAGCACACATACATGT 82288 **ATAC** AAGCACACG ACATGT TTCGTGTGT TGTACA GAM3643 TRAF3 3' AAGCACACAGTGTGCGCCCCCA 82307 ATACACA AT AAGCACACG TGT CCA TTCGTGTGT GCG GGT CACAC GG GAM3643 LOC123855 5' AAGCACACGAACGTCTCC 82308 TACAC A AAGCACACGA ATGT TCC TTCGTGTGCT TGCA AGG ____ G GAM3643 LOC143310 5' AGCCACGATACATACGT С 82309 AGC CACGATACA ATGT TCG GTGCTATGT TGCA GAM3643 LOC148918 5' GCACACGAAACCACATCCA 82310 T A GT GCACACGA AC CAT ATCCA CGTGTGCT TG GTG TAGGT Τ_ GAM3643 LOC149465 5' AGCAGACCACGCATGTATCCA 82311 C GA A AGCA AC TAC CATGTATCCA TCGT TG GTG GTACATAGGT C __ C GAM3643 LOC150577 3' AGCACATCACATGTATC 82312 CGATA С AGCACA CACATGTAT C TCGTGT GTGTACATA G Α Α GAM3643 LOC157507 5' AGCACACATACACAGC 82313 G T AGCACAC ATACACA GT TCGTGTG TATGTGT CG GAM3643 LOC159199 5' AAGCACACGAATGCATGT 82314 **TACA** AAGCACACGA CATGT

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TTCGTGTGCT GTACA
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TAC_

GAM3643 LOC220513 3' AAGTACACATCAGCCTGTATCC 82280 C ATACACA

A AAG ACACG TGTATCCA

TTC TGTGT ACATAGGT

A AGTCGG

GAM3643 LOC92305 3' AGCGCACGGTGCACACATCCA 82315 A ATA GT

AGC CACG CACAT ATCCA

TCG GTGC GTGTG TAGGT

C CAC

GAM3643 LOC93622 3' AAGCACACGAGTATACTTCCA 82316

AAGCACACGA ATG TCCA

TACAC TA

GT

GAC

TTCGTGTGCT TAT AGGT

CA GA

GAM3644 ACAT1 3' CACTGATTACAGCAGGCCT 82319 A TT T

CACTGATTG CA G GCCT

GTGACTAAT GT T CGGA

_ CG C

GAM3644 CABC1 3' ACTGGTGACACCTGTGCCTC 82320 AT

ACTG TGACAT TGTGCCTC

TGAC ACTGTG ACACGGAG

C G

GAM3644 CACNA2D2 3' CACTGTTTGACATTCAGC 82321 A

CACTG TTGACATT GC

GTGAC AACTGTAA CG

A GT

GAM3644 CDS1 3' ACTGACTTCCTATTGTGCCT 82322

ACTGATT ATTGTGCCT

TGACTGA TAACACGGA

AGGA

GAM3644 DBT 3' CAGTGACAAATATTGTGCCT 82323 C T C

CA TGAT GA ATTGTGCCT

11 1111 11 111111111

GT ACTG TT TAACACGGA

CTA

GAM3644 EMX2 3' TGATTGACAGCTCCCC 82324 TT G

TGATTGACA GT CCTC

ACTAACTGT CG GGGG

__ A

GAM3644 GPR81 3' CATTGATTGACTGAGCCC 82325 C AT T

CA TGATTGAC TG GCCT

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GT ACTAACTG AC CGGG
                       __ T
GAM3644 HIVEP3 5' CTGCTGGGTTTGTGCCTC 82326 A ACA
                    CTG TTG TTGTGCCTC
                    GAC GAC AACACGGAG
                     _ CCA
GAM3644 IL17E 5' CACTGACTGACAGGCCTC 82327
                                           TTGT
                    CACTGATTGACA GCCTC
                    GTGACTGACTGT CGGAG
                         С
GAM3644 LAMP2 3' CAGTGCCATGCATTGTGCTTC 82328
                                          C AT A
                    CATG TG CATTGTGC TC
                    GT AC AC GTAACACG AG
                     C GGT
                             Α
GAM3644 LRAT
            3' ACTGATTGGCCCCGCCC
                                 82329
                                         ACA G
                    ACTGATTG TT TGCCT
                    TGACTAAC GG GCGGG
                       C__ G
GAM3644 MAP3K7IP1 3' CACTGATTGTGTGGCT
                                           ACAT C
                                  82330
                    CACTGATTG TGTG CT
                    GTGACTAAC ACAC GA
                                         __ CAT
GAM3644 MPP3
            3' TGATGGTGAAGTGTGCCTC 82331
                    TGAT TGA TGTGCCTC
                    ACTA ACT ACACGGAG
                      CC TC_
GAM3644 PDE1B 3' CTGATGACATCAAACACT 82332
                                         T T_
                    CTGAT GACATTG GC CT
                    GACTA CTGTAGT TG GA
                         ТТ
GAM3644 RAD52 5' CTGGTTGACCTGCGCCTC 82333
                                         A A
                    CTG TTGAC TTGTGCCTC
                    GAC AACTG GACGCGGAG
                      С
GAM3644 RAD52
             5' CTGGTTGACCTGCGCCTC 82333
                                         A A
                    CTG TTGAC TTGTGCCTC
                    GAC AACTG GACGCGGAG
                      С
GAM3644 RAD52 5' CTGGTTGACCTGCGCCTC 82333
                                         A A
                    CTG TTGAC TTGTGCCTC
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GAC AACTG GACGCGGAG
                      С
GAM3644 RAD52 5' CTGGTTGACCTGCGCCTC 82333
                                          A A
                     CTG TTGAC TTGTGCCTC
                     GAC AACTG GACGCGGAG
                      C _
GAM3644 TGFB1
             3' CACTGGTCCCCTGTGCCT 82334
                                           A GACA
                     CACTG TT TTGTGCCT
                     GTGAC AG GACACGGA
                       C GG
GAM3644 UBE3A 3' CACTGATCACGTGCCT
                                  82335
                                           ACAT
                     CACTGATTG TGTGCCT
                     GTGACTAGT GCACGGA
GAM3644 UBE3A 3' CACTGATCACGTGCCT
                                  82335
                                           ACAT
                     CACTGATTG TGTGCCT
                     GTGACTAGT GCACGGA
GAM3644 UBE3A 3' CACTGATCACGTGCCT
                                           ACAT
                                  82335
                     CACTGATTG TGTGCCT
                     11111111 1111111
                     GTGACTAGT GCACGGA
GAM3644 WNT5A 5' TGATTGACTGCGCTTC
                                  82336
                                           AT C
                     TGATTGAC TGTGC TC
                     ACTAACTG ACGCG AG
GAM3644 ZNF26 5' CACGGATGGATTTGTGCCT 82337
                                          T T CA
                     CAC GAT GA TTGTGCCT
                     GTG CTA CT AACACGGA
                      CCA
GAM3644 CSMD1 3' TGCTGGGCATTGTGCTTC 82338
                                          ΑА
                                                 C
                     TG TTG CATTGTGC TC
                     11 111 11111111 11
                     AC GAC GTAACACG AG
                      _ CC
                             Α
GAM3644 DKFZP434E2135 3' ACTGACTCGGTATGTGCCTC 82339
                                                  GACAT
                     ACTGATT TGTGCCTC
                     TGACTGA ACACGGAG
                        GCCAT
GAM3644 DKFZP434P0721 3' ACTGATGACTGTGCCTC
                                        82340
                                               T AT
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ACTGAT GAC TGTGCCTC

TGACTA CTG ACACGGAG

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GAM3644 DKFZp761O0113 5' CACTGTTGACATTCTTGC 82341 A
                                                   G
                     CACTG TTGACATT TGC
                     GTGAC AACTGTAA ACG
                           GA
GAM3644 FLJ10521 3' CATTGAGTGAGACCATGCCT 82342 C T C TG
                     CA TGA TGA AT TGCCT
                     11 111 111 11 11111
                     GT ACT ACT TG ACGGA
                      A C C GT
GAM3644 FLJ12355 3' TGATTCCCATTTGTGCCTC 82343
                                           GA _
                     TGATT CATT GTGCCTC
                     ACTAA GTAA CACGGAG
                       GG A
GAM3644 FLJ12891 3' TAATTGACACATGACTGTGC 82344
                     TGATTGACAT TGTGC
                     ATTAACTGTG ACACG
                         TACTG
GAM3644 FLJ14327 3' CACTGATTCACAGCTACT 82345
                                         G TT GC
                     CACTGATT ACA GT CT
                     GTGACTAA TGT CG GA
                        G __ AT
                                           __ CAT
GAM3644 FLJ20079 5' TGATGGTGAGATGTGCCTC 82346
                     TGAT TGA TGTGCCTC
                     ACTA ACT ACACGGAG
                       CC CT
GAM3644 FLJ20298 3' TGATGCATTGTGCTTC
                                  82347
                                         ΤA
                                               C
                     TGAT G CATTGTGC TC
                     ACTA C GTAACACG AG
                           Α
GAM3644 GADD45A 5' CACTAATTGGGCCGCTGCCTC 82348
                                               ACA _
                     CACTGATTG TTG TGCCTC
                     GTGATTAAC GGC ACGGAG
                         CC_ G
GAM3644 KIAA0537 3' CTGAAAACTGATTGTGCCT 82349
                                           TT __
                     CTGA GAC ATTGTGCCT
                     GACT TTG TAACACGGA
                       T_ AC
GAM3644 KIAA1463 3' CACTGATTAGCATGCTGGTCCT 82350
                                               A __ TG
                     CACTGATTG CAT TG CCT
```

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GTGACTAAT GTA AC GGA
                        C CG CA
GAM3644 KIAA1492 3' AATTGATGCATTTTGTGCCT 82351
                     GATTGA CAT TGTGCCT
                     TTAACT GTA ACACGGA
                       AC AA
GAM3644 KIAA1548 3' ACTGCTGTGCTGTCCT
                                   82352
                                          A ACA
                     ACTG TTG TTGTGCCT
                     TGAC GAC GACACGGA
                      AC
GAM3644 LSFR2 3' CACCAAAACATTGTGCTTC 82353
                                         TG TT
                     CAC A GACATTGTGC TC
                     GTG T TTGTAACACG AG
                      GT
                              Α
GAM3644 MGC21654 3' CACTGATTGCAAAATAGGTCTC 82354
                                               A TT C
                     CACTGATTG CA GTG CTC
                     GTGACTAAC GT TAT GAG
                        _ TT CCA
GAM3644 NXPH3 3' CTGCTGGCATTTGTGCCT 82355
                                         A A _
                     CTG TTG CATT GTGCCT
                     GAC GAC GTAA CACGGA
                      _ C A
GAM3644 RAP2B 3' CACTGTATTGGCATCAGTG 82356
                                           _ A _
                     CACTG ATTG CATT GTG
                     GTGAC TAAC GTAG CAC
                       A C T
GAM3644 SEMA4F 3' CACTGATTGCAAACGTATCT 82357
                                             AT C
                     CACTGATTG CA TGTG CT
                     GTGACTAAC GT GCAT GA
                        _ TT A
GAM3644 ST6GalNAcl 3' CACTGTATCCTGTGCCT
                                           GACA
                                    82358
                     CACTG ATT TTGTGCCT
                     GTGAC TAG GACACGGA
                       Α
GAM3644 LOC143188 5' CACTAATTGATGTCCAGCCT 82359
                                              CA GT
                     CACTGATTGA TT GCCT
                     GTGATTAACT AG CGGA
                         AC GT
GAM3644 LOC143915 3' CACTATCTTGCTGTGCCT 82360
                                           A_ ACA
                     CACTG TTG TTGTGCCT
```

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GTGAT AAC GACACGGA
                       AG ___
GAM3644 LOC144571 3' CTGATTGATGTCTGATGTCTC 82361
                                              CA C
                     CTGATTGA TTG TG CTC
                     GACTAACT GAC AC GAG
                        ACA T A
GAM3644 LOC147178 3' ACTGAGTGACATTGCCTC 82362
                                           T TG
                     ACTGA TGACAT TGCCTC
                     TGACT ACTGTA ACGGAG
                       С
GAM3644 LOC147991 5' ACTGATTAAATGATGCCT 82363
                                            СТ
                     ACTGATTGA AT GTGCCT
                     TGACTAATT TA TACGGA
                        С
GAM3644 LOC148304 3' ACTGATCTACAGCATTGTGCCT 82364
                                              GA
                     ACTGATT CATTGTGCCT
                     TGACTAG GTAACACGGA
                       ATGTC
GAM3644 LOC150271 3' CACTCAGAACTTGTGCCTC 82365
                                           GATT A
                     CACT GAC TTGTGCCTC
                     GTGA TTG AACACGGAG
                      GTC_ _
GAM3644 LOC151657 3' CTGATTCACCACACCTC 82366
                                           GA TG
                     CTGATT CAT TGCCTC
                     GACTAA GTG GTGGAG
                       GT
GAM3644 LOC153114 5' CACTGATTGGTGCCT
                                  82367
                                           ACATT
                     CACTGATTG GTGCCT
                     GTGACTAAC CACGGA
GAM3644 LOC153232 5' ACTGAAACAGTTTGTGCCT 82368
                                           TT __
                     ACTGA GACA TTGTGCCT
                     TGACT TTGT AACACGGA
                       _ CA
GAM3644 LOC155081 3' CCCCTGCATTGTGCCT 82369 GA A
                     CT TTG CATTGTGCCT
                     GG GAC GTAACACGGA
                     G_ _
GAM3644 LOC159184 3' AATTGATGTCTGTGCCTC 82370
                                           CA_
                     GATTGA TTGTGCCTC
```

TTAACT GACACGGAG ACA GAM3644 LOC160954 5' CACTGATCGGTGTTCGCGTGCC 82371 ACAT Т CACTGATTG TGTGCCT **GTGACTAGC GCACGGA** CACAAGC GAM3644 LOC161846 5' CATTGGGTAACCTGTGCCTC 82372 C AT A CA TG TGAC TTGTGCCTC GT AC ATTG GACACGGAG A CC GAM3644 LOC199858 5' CACTAGGCATTGTGCCT 82373 **ATTGA** CACTG CATTGTGCCT GTGAT GTAACACGGA CC GAM3644 LOC200853 5' CACTGATTTCAAAGTGTCTC 82374 GA TT C CACTGATT CA GTG CTC GTGACTAA GT CAC GAG A_ TT A GAM3644 LOC201411 3' CACTGATTGATAAAATATCT 82375 CATT C CACTGATTGA GTG CT GTGACTAACT TAT GA ATTT A GAM3644 LOC202802 3' CCCCTGCATTGTGCCT 82369 GA A CT TTG CATTGTGCCT GG GAC GTAACACGGA G_ _ GAM3644 LOC203078 3' CACTGATTAAGTATTGTGCCT 82376 CACTGATTGA ATTGTGCCT GTGACTAATT TAACACGGA CA GAM3644 LOC220394 5' TGTTCGTCAGTGTGCCTC 82377 A A T TG TTG CA TGTGCCTC 11 111 11 11111111 AC AGC GT ACACGGAG AAC GAM3644 LOC221354 3' CACAGTACATTGTGCCTC 82378 **TGATTG** CAC **ACATTGTGCCTC** Ш **TGTAACACGGAG** GTG

TCA___ GAM3644 LOC222228 3' CCCCTGCATTGTGCCT 82369 GA A CT TTG CATTGTGCCT

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GG GAC GTAACACGGA
                       G_ _
GAM3644 LOC222233 3' CCCCTGCATTGTGCCT 82369 GA A
                      CT TTG CATTGTGCCT
                      GG GAC GTAACACGGA
                       G_ _
GAM3644 LOC222256 3' CAGTGATTGACAGGCCCCTC 82379 C
                                                   TT G
                      CA TGATTGACA GT CCTC
                      11 111111111 11 1111
                      GT ACTAACTGT CG GGAG
                            C G
                       С
GAM3644 LOC254020 3' ACTAATTGGCATCTGGCTC 82380
                                                A G C
                      ACTGATTG CATT TG CTC
                      1111111 1111 11 111
                      TGATTAAC GTAG AC GAG
                          C C
GAM3644 LOC254413 5' TAACTAAGCATTGTGCTTC 82381
                                                    C
                      TGATTGA CATTGTGC TC
                      ATTGATT GTAACACG AG
                         С
                             Α
GAM3644 LOC255520 3' CACTGATTGTCCACTAGC 82382
                                                A_ T
                      CACTGATTG CATTG GC
                      GTGACTAAC GTGAT CG
                          AG
GAM3644 LOC256113 5' CTTATTGATTGCCCCTC 82383 G CA G
                      CT ATTGA TTGT CCTC
                      11 11111 1111 1111
                      GA TAACT AACG GGAG
                       A G
GAM3644 LOC89919 5' ACTGAATGTTTGTGCCT
                                             T ACA
                                     82384
                      ACTGA TG TTGTGCCT
                      TGACT AC AACACGGA
                        T A__
GAM3644 LOC91974 5' ACTGACTGGCTGACCC
                                              ACA T
                                     82385
                      ACTGATTG TTG GCCT
                      TGACTGAC GAC TGGG
                          C__ _
GAM3644 LOC96597 5' CTGATCCAACTGTGCCTC 82386
                                              GAC
                      CTGATT ATTGTGCCTC
                      GACTAG TGACACGGAG
                         GT_{-}
GAM3645 ARNT2 3' TGGAAGAAGTGTTTCATGG 82389
                                               T GGTGA
                      TGGAAGAA GTGT ATGG
```

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ACCTTCTT CACA TACC
                         T AAG
GAM3645 CYP8B1 3' TGGGAGATGGGTGAATGG 82390 A ATG T
                     TGG AGA TG GGTGAATGG
                     ACC TCT AC CCACTTACC
GAM3645 GAS7
             3' TGGAGAATGTGTTTGCTGTGG 82391
                                            Α
                                                GG AA_
                     TGGA GAATGTGT TG TGG
                     ACCT CTTACACA AC ACC
                           A GAC
GAM3645 ITGA11 3' TGGGGGAATGTGTGAGTTGC 82392
                                            AA
                                                  TGAATG
                     TGG GAATGTGTGG GC
                     ACC CTTACACACT
                                     CG
                      CC
                             CAA
GAM3645 MMP19 3' TGGGAGCATGTGAATAAAATGG 82393 A A TGGT
         CA
                      TGG AG ATGTG GAATGGCA
                     ACC TC TACAC TTTACCGT
                      C G TTAT
GAM3645 MMP19 3' TGGGAGCATGTGAATAAAATGG 82393 A A TGGT
                      TGG AG ATGTG GAATGGCA
         CA
                     ACC TC TACAC TTTACCGT
                      C G TTAT
                                             \mathsf{AT}\ \mathsf{T}\ \mathsf{A}
GAM3645 MPV17 3' GAAGAGTGGGGATGAGTGGCA 82394
                     GAAGA GTG GG TGA TGGCA
                     CTTCT CAC CC ACT ACCGT
                        \mathsf{C} \mathsf{T} \mathsf{C}
GAM3645 NSF
            3' TGGAAGAAGTGTGTGGAGGG 82395
                                                 TGAAT
                     TGGAAGAA TGTGTGG GG
                     ACCTTCTT ACACACC CC
                         С
                            TC
GAM3645 USH3A 5' TGGAGCCTGGTGAATGG 82396
                                           AGAAT G
                     TGGA GT TGGTGAATGG
                     ACCT CG ACCACTTACC
                           G
GAM3645 VAX2
             3' GGAAGAGTGTGTGGCTGC 82397
                                           Α
                                                GAATG
                     GGAAGA TGTGTGGT GC
                     CCTTCT ACACACCG CG
                        С
                            \mathsf{A}_{\_}
GAM3645 C20orf175 3' TGGGGGATGTGCGGGGATGGCA 82398
                                              AAA
                                                     ΤA
```

TGG GA TGTGTGG GA TGGCA

```
ACC CT ACACGCC CT ACCGT
                      CC _ C _
GAM3645 DKFZp762A227 5' TGGAAGAATGTCAGAAGAATGG 82399
                                                   GT T
         CA
                      TGGAAGAATGT GG GAATGGCA
                     ACCTTCTTACA CT CTTACCGT
                         GT T
GAM3645 FLJ13052 3' GAGGAATGTGTGGGTCCGTGGC 82400
                                            Α
                                                 TGAA
                     GA GAATGTGTGG TGGC
                     ACCG
                     CT CTTACACACC
                     С
                          CAGGC
GAM3645 FOXP1 3' TGGTAGAATGTGGTGGCA 82401
                                         Α
                     TGG AGAATGTG TGGTG
                     ACC TCTTACAC ACCGT
                          C
GAM3645 KIAA0795 3' TGGGAGAATGTGTGA 82402
                                         Α
                                              G
                     TGG AGAATGTGTG TGA
                     ACC TCTTACACAC ACT
                      С
GAM3645 KIAA1026 3' TGAGGGAATTAATGAATGG 82403
                                          AA GTG
                     TGG GAAT TGGTGAATGG
                     ACT CTTA ATTACTTACC
                      CC
GAM3645 KIAA1145 3' GAAGGCGGTGAATGG
                                  82404
                                         AATGT
                     GAAG GTGGTGAATGG
                     CTTC CGCCACTTACC
GAM3645 KIAA1243 5' TGGTGGAATGTATTGGTG 82405
                                          AΑ
                     TGG GAATGTGT GGTG
                     ACC CTTACATA CCAC
                      AC
                           Α
GAM3645 KIAA1318 3' TGTAAGAATGTAGTGAGATGG 82406 G AT
                     TG AAGA GTGTGGTGA ATGG
                     AC TTCT TACATCACT TACC
                     Α ___
                             С
GAM3645 KIAA1644 3' GGACAGTGTCGTGAATGG 82407
                                          AGAAT G
                     GGA GTGT GTGAATGG
                     CCT CACA CACTTACC
                      GT___ G
GAM3645 MGC4251 3' TGGAGGACTGTGTGGTCTGG 82408
                                            ΑА
                                                  GAA
```

TGGA GA TGTGTGGT TGG

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ACCT CT ACACACCA ACC
                     CG
                           G___
GAM3645 RAI 3' TGGGGGATGTGATGG 82409 AA ATG A
                    TGG GA TGTGGTGATGG
                    ACC CT ACACTACT ACC
                     CC ___
GAM3645 TBC1D2 3' TGGAAGAGGTGACGAAAGGGTG 82410 ATGT GT ____
        GCA
                      GGAAGA GTG GAA TGGCA
                    CCTTCT CAC CTT ACCGT
                      C TG TCCC
GAM3645 LOC125488 3' TGGGAAAATGTGTCCCTGGCA 82411 A
                                              GGTGAA
                    TGG AGAATGTGT TGGCA
                    ACC TTTTACACA ACCGT
                     С
                         GGG
GAM3645 LOC132617 3' TGGAAAATGTGTATGGTG 82412
                                          Α
                    TGGAAGA TGTGTGGTG
                    ACCTTTT ACATACCAC
                       AC
GAM3645 LOC147694 3' TGGTGGGAATGTAAAATGGCA 82413
                                           AA TGGT
                    TGG GAATGTG GAATGGCA
                    ACC CTTACAT TTTACCGT
                     ACC
GAM3645 LOC148014 3' TGGACGGATGTTTGAATGGC 82414 AGAAT GG
                    TGGA GTGT TGAATGGC
                    ACCT TACA ACTTACCG
                     GCC__ A
GAM3645 LOC155376 5' TGGAGATCCTGGGTGAATGG 82415 A ATG T
                    TGGA GA TG GGTGAATGG
                    ACCT CT AC CCACTTACC
                     _ AGG _
GAM3645 LOC157931 3' TGGGGGAGGGTGGCAAACATGG 82416 AA ATGT TG ___
        CA
                     TGG GA GTGG A ATGGCA
                    ACC CT CACC T TACCGT
                     CC CC_ GT TG
GAM3645 LOC222233 5' TGGAGATCCTGGGTGAATGG 82415 A ATG T
                    TGGA GA TG GGTGAATGG
                    ACCT CT AC CCACTTACC
                     _ AGG _
GAM3645 LOC253532 5' TGGAGATCCTGGGTGAATGG 82415 A ATG T
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TGGA GA TG GGTGAATGG

```
ACCT CT AC CCACTTACC
                      _ AGG _
GAM3645 LOC253805 3' TGTGAGAATGTGTGGCTGA 82417 GA
                     TG AGAATGTGTGG TGA
                     AC TCTTACACACC ACT
                      AC
                           G
GAM3645 LOC254747 5' TGGAGAGGTCTGTGAGTGGC 82418 A AT G G A
                     TGGA GA GT TG TGA TGGC
                     ACCT CT CA AC ACT ACCG
                      _ C_ G _ C
GAM3645 LOC254875 5' TGGAGATCCTGGGTGAATGG 82415
                                           A ATG T
                     TGGA GA TG GGTGAATGG
                     ACCT CT AC CCACTTACC
                      AGG
GAM3645 LOC256537 3' GGAAGAATGTTCGGTTGAATGG 82419
                                                G
        С
                     GGAAGAATGT TGGT GAATGGC
                     CCTTCTTACA GCCA CTTACCG
                         A A
GAM3646 DKFZP434A043 3' GTGACAGATTTTAAAATCG 82422
                                               ATCAC
                     GTGATAGATTT GTCG
                     CACTGTCTAAA TAGC
                         ATTT
GAM3646 IL1RAPL1 3' ATCGGATAGATTTGTCCA 82423
                                          Т
                                              A
                     ATCG GATAGATTT TC CG
                     TAGC CTATCTAAA AG GT
                           С
GAM3647 RECQL5 3' TAAAACAGATGCGTTGA
                                   82426
                                           TGTA
                     TAAAACAG GCGTTGA
                     ATTTTGTC CGCAACT
                        TA
GAM3647 FLJ12595 3' TAAAACAGAGTAGGGGTT 82427
                                           T C_
                     TAAAACAG GTAG GTT
                     ATTTTGTC CATC CAA
                        T CC
GAM3647 FLJ20558 5' AAAACAGTGTAACCTGAATT 82428
                                              G
                     AAAACAGTGTAGC TTGAATT
                     TTTTGTCACATTG GACTTAA
GAM3647 GTF2A2 3' TATAGCACAGTGTAGTCATT 82429
                                           AA
                     TATA ACAGTGTAG CGTT
```

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CG
                            Α
GAM3647 KIAA1577 3' TATAAAACAGTGATTTAGTT 82430
                                              TAGC
                     TATAAAACAGTG GTT
                     ATATTTTGTCAC CAA
                         TAAAT
GAM3647 KIAA1915 5' TAAAACAGTGCGGCTTCCAATT 82431
                                              TA G G
                     TAAAACAGTG GC TT AATT
                     ATTTTGTCAC CG AG TTAA
                         GC A G
GAM3647 LOC150848 3' AAACAGTGTAATAAAT 82432
                                            CGT
                     AAACAGTGTAG TGAAT
                     TTTGTCACATT ATTTA
GAM3647 LOC157317 3' TAAGACAGTGTAGGAAT 82433
                                          Α
                                              CGTT
                     TAA ACAGTGTAG GAAT
                     ATT TGTCACATC CTTA
                      С
                                          CATA __
GAM3648 ANXA9 3' GGATGACCCAGGTACAGATA 82436
                     GGA GATC GGTACAGATA
                     CCT CTGG CCATGTCTAT
                      A GT
GAM3648 CENTD2 3' TAGGGTAAAATATACAGATA 82437
                                           ACA TCG
                     TAGG TAGA GTACAGATA
                     ATCC ATTT TATGTCTAT
                      C__ TA_
                                           ACA TCG
GAM3648 CENTD2 3' TAGGGTAAAATATACAGATA 82437
                     TAGG TAGA GTACAGATA
                     ATCC ATTT TATGTCTAT
                      C__ TA_
GAM3648 P53AIP1 3' TAGGACATACTACGTACAG 82438
                                            GAT G
                     TAGGACATA CG TACAG
                     ATCCTGTAT GC ATGTC
                        GAT _
GAM3648 ARHGEF3 3' GGACAAAGGTACAGATAC 82439
                                           TAGATC
                     GGACA
                            GGTACAGATAC
                        IIIII
                     CCTGT CCATGTCTATG
                       \mathsf{TT}_{\_}
GAM3648 CARD6 3' GGATATAACACTTACAGATA 82440 C ATCGG
                     GGA ATAG TACAGATA
```

ATAT TGTCACATC GTAA

```
A GTGA
GAM3648 DIS3 3' GGACATGGCTACAGATA 82441
                                      AGATC
                    GGACAT GGT ACAGATA
                    CCTGTA CCG TGTCTAT
GAM3648 DKFZP434J214 3' AGACATCAGTACAGATA 82442
                                           TAGA
                    GGACA TCGGTACAGATA
                    TCTGT AGTCATGTCTAT
GAM3648 H2AFY2 3' TAGGAGTAGTTACAGATA 82443
                                        CA ATCGG
                    TAGGA TAG TACAGATA
                    ATCCT ATC ATGTCTAT
                      C A
GAM3648 KIAA0280 3' TAGGGCACAGAGCACAGAT 82444
                                        A TCG
                    TAGG CATAGA GTACAGAT
                    ATCC GTGTCT CGTGTCTA
                     С
GAM3648 KIAA1786 3' GACGTAAGCATACAGATAC 82445
                                        A ATCG
                    GAC TAG GTACAGATAC
                    CTG ATT TATGTCTATG
                     C CG
GAM3648 KIAA1904 3' CAGGACGTGGGACACAGAT 82446
                                          ATAGATC
                    TAGGAC
                            GG TACAGAT
                    CC GTGTCTA
                    GTCCTG
                      CAC
                            Т
GAM3648 LMOD1 3' TAGGGCACACAGATATGGGT 82447
                                           _ C__
                    TAGG ACATAGAT GGT
                    ATCC TGTGTCTA CCA
                     CG
                          TAC
GAM3648 MAP3K2 3' TAGGATCTAAAGAATACAGATA 82448
                                          CA TC
                    TAGGA TAGA GGTACAGATA
                    ATCCT ATTT TTATGTCTAT
                      AG C_
GAM3648 LOC147429 5' GGAGTAAAGTTGTACAGATAC 82449
                                          CA TCG
                    GGA TAGA GTACAGATAC
                    CCT ATTT CATGTCTATG
                     C_ CAA
GAM3648 LOC158654 3' GGACTGGCAGGACAGATAC 82450
                                          ATAGAT T
                    GGAC CGG ACAGATAC
```

CCT TATT ATGTCTAT

```
CCTG GTC TGTCTATG
                     ACC___ C
GAM3648 LOC255146 3' TAGGGCTAGGCCACAGATA 82451 ACA AT GGT
                   TAGG TAG C ACAGATA
                    ATCC ATC G TGTCTAT
                     CG CG
            5' TGCCCGGCGCCCCCACTCC 82454
GAM3649 AMH
                   TGCCTGGCGCCCCCAC CC
                    ACGGCCGCGGGGGTG GG
GAM3649 BCR
            3' GCTTGGGGCGCCCTCGGGT 82455 C C CCCCA
                    GC TGG GC CCCTCGGGT
                    CG ACC CG GGGAGCCCA
                    ACC
           3' GCTTGGGGCGCCCTCGGGT 82455 C C CCCCA
GAM3649 BCR
                   GC TGG GC CCCTCGGGT
                   CG ACC CG GGGAGCCCA
                    ACC
GAM3649 CHES1 3' TGCCTGGTGCCACAAGCTTGGG 82456
                                        C CC CC C
                    TGCCTGG GCC CA CT GGGT
        Т
                    ACGGACC CGG GT GA CCCA
                      A T_ TC A
                                       T GCCC C
GAM3649 CHST1 5' GCCGGCTCCATCCTCGGG 82457
                    GCC GGC CCA CCTCGGG
                    CGG CCG GGT GGAGCCC
                     _ A___ A
                                         CC
GAM3649 PKP1
            5' CCTGGCGCTTCCACCCTGG 82458
                                             С
                   CCTGGCGC CCACCCT GG
                    GGACCGCG GGTGGGA CC
                       AA
GAM3649 PTPN7 3' TGCTTGGGCAGGACCTCGGGT 82459
                                         C C CCCCAC
                    TGC TGG GC CCTCGGGT
                    ACG ACC CG
                              GGAGCCCA
                     A _ TCCT__
GAM3649 PTPN7
            3' TGCTTGGGCAGGACCTCGGGT 82459
                                         C C CCCCAC
                   TGC TGG GC
                              CCTCGGGT
                    ACG ACC CG
                              GGAGCCCA
                     A _ TCCT__
GAM3649 PTPN7 3' TGCTTGGGCAGGACCTCGGGT 82459
                                         C C CCCCAC
                   TGC TGG GC CCTCGGGT
```

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ACG ACC CG GGAGCCCA
                      A _ TCCT__
GAM3649 SIAT4C 5' TGCCTCGGGCCACCTTTGGGT 82460
                                            C CCC CTC
                     TGCCT GG GCC ACC GGGT
                     ACGGA CC CGG TGG CCCA
                       G \_ \_ AAA
GAM3649 VCY
            5' TGCCTGGCCTCCCTGTGTACCC 82461
                                            G_ CC____ CTCG
         GAG
                       CCTGGC CCC
                                   ACC G
                     111111 111
                            \parallel \parallel \parallel \parallel
                     GGACCG GGG
                                  TGG C
                       GA ACACAIII GCTC
GAM3649 BIRC8 5' TGCATGGCGGGGCTCCTCGGGT 82462
                                            C CCCCCAC
                     TGC TGGCG
                              CCTCGGGT
                     ACG ACCGC
                                GGAGCCCA
                      T CCCGA
GAM3649 CHST3 5' TGCCTGGCGCCCTCCCCG 82463
                                             CCAC
                     TGCCTGGCGCCC CCTCG
                     ACGGACCGCGGG GGGGC
                         Α___
GAM3649 FLJ14249 3' TGCCTGGCCTCCCCTGGGGGT 82464
                                              GC ACCCTC
                     TGCCTGGC CCCC
                                    GGGT
                     ACGGACCG GGGG
                                     CCCA
                        GA ACC
GAM3649 FLJ20967 5' TGCTGGGCGCCCCTGGGCAGGG 82465
                                             CT
                                                  CACCCTC
                     TGC GGCGCCCC
         Т
                                    GGGT
                     Ш
                     ACG CCGCGGGG
                                    CCCA
                           ACCCGT
                      AC
GAM3649 KIAA0310 5' TACCTGAAGCTTCATCCTCGGG 82466
                                             C CCC C
         Т
                     TGCCTGG GC CA CCTCGGGT
                     ATGGACT CG GT GGAGCCCA
                        T AA_ A
GAM3649 KIAA1940 5' TGCCTGGGCCCCGGGCATTGGG 82467
                                               C CACCCTC
                     TGCCTGG GCCCC
                                     GGGT
                     ACGGACC CGGGG
                                     CCCA
                        CCCGTAA
GAM3649 MGC15873 3' GCCTGGCGCTCCTGTCAGAT 82468
                                               C CACCC
                     GCCTGGCGC CC TCGGGT
                     CGGACCGCG GG AGTCTA
                        A AC_
GAM3649 NCKX3 3' TGCCTGGCACCTCATGGATGGG 82469
                                               CC CCCTC
         Т
                     TGCCTGGCGCC CA GGGT
```

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ACGGACCGTGG GT CCCA
                        A ACCTA
GAM3649 NMT1 3' TGTCTGCCACTGTCCTCGGGT 82470 C G CCCCAC
                    TG CTG CGC CCTCGGGT
                    AC GAC GTG GGAGCCCA
                    A G ACA
GAM3649 PCBP3 3' CCTGGCGCTCCCCATGGG 82471
                                          CCCTC
                    CCTGGCGC CCCCA GGG
                    GGACCGCG GGGGT CCC
                       A A
GAM3649 RAI16 3' TGCCTGGCGCCGCCGTGTACC 82472
                                           _ C____ CTCG
        CGAGGG
                       TGGCGCC CC ACC GG
                    ACCGCGG GG
                               TGG CC
                       C GCACAIII GCTC
GAM3649 RIN3 3' TGCTTGGCGCCCTGGCGTACCC 82473 C CC CTCG
        GAG
                      C TGGCGCCC ACC G
                           \parallel \parallel \parallel \parallel
                    G ACCGCGGG
                                TGG C
                    Α
                       ACCGCAIII GCTC
GAM3649 LOC125058 3' TGTCTGGCTGCCCTCGAG 82474 C GCCCCCA
                    TG CTGGC CCCTCGGG
                    AC GACCG
                              GGGAGCTC
                     A AC
GAM3649 LOC145501 3' TGCCGGCGCCCTTGCCACGGGT 82475 T
                                               CCAC T
                    TGCC GGCGCCC CC CGGGT
                    ACGG CCGCGGG GG GCCCA
                         AAC_ T
GAM3649 LOC146272 5' GCCTGGCGCCTCCACCCC 82476
                                            С
                    GCCTGGCGCC CCACCCTC
                    CGGACCGCGG GGTGGGGG
                        Α
GAM3649 LOC148930 3' TGCCTGGCCCTCTGCTCCCAC 82477
                                             С
                    TGCCTGGC GC CCCAC
                    ACGGACCG CG GGGTG
                       GGAGA A
                                             _ _ CCTCG
GAM3649 LOC149664 5' GCCTGGCGCTCCCGCACGGT 82478
                    GCCTGGCGC CCC CAC GGT
                    CGGACCGCG GGG GTG CCA
                       A C
GAM3649 LOC150372 5' TGCTAGGCGCCCCTGCAGGGT 82479
                                           CT
                                                CACCCTC
                    TGC GGCGCCCC GGGT
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ACG CCGCGGGG
                                CCCA
                    AΤ
                         ACGT
GAM3649 LOC151188 5' TACCTGGCGCTCTCGCGG 82480
                                          CCCCACC
                   TGCCTGGCGC CTCG GG
                   ATGGACCGCG GAGC CC
                       A____ G
GAM3649 LOC157543 5' CCTGGCGCTCCTGCGAGG 82481
                                          CCCCAC _ _
                   CCTGGCGC CCT CG GG
                   GGACCGCG GGA GC CC
                      A CT
GAM3649 LOC200081 3' TGCCTGGCTGTCCCTGGGG 82482
                                          GCCCCCA C
                   TGCCTGGC CCCT GGG
                   ACGGACCG
                             GGGA CCC
                      ACA
GAM3649 LOC51162 3' TGCCTGGCCTTCCGCTCAG 82483
                                          GCCCCCA
                   TGCCTGGC CC CTCGG
                   ACGGACCG
                             GG GAGTC
                      GAA C
GAM3649 LOC51162 3' TGCCTGGCCTTCCGCTCAG 82483
                                          GCCCCCA
                   TGCCTGGC
                            CC CTCGG
                   ACGGACCG GG GAGTC
                      GAA C
GAM3650 FASN 3' TTGCATGGCGGGGGTGGGG 82486
                                          TGTTAAA
                   TTGCATGGCG TGGGG
                   AACGTACCGC
                               ACCCC
                       CCCC
GAM3650 LOC153196 5' TCACATTGTTAAATGGGG 82487 TG GGCG
                   T CAT TGTTAAATGGGG
                   A GTA ACAATTTACCCC
                    GT
GAM3650 LOC200830 3' TTACATGGTGGCAGAATGGGG 82488
                                        CGT TA
                   TTGCATGG GT AATGGGG
                   AATGTACC CG TTACCCC
                      AC_ TC
GAM3651 ARG2
            3' CATGTCAGTGCACAGTGT 82491
                                       CA TG
                   TATGTCAG GC AGTGT
                   GTACAGTC CG TCACA
                      A_ TG
                                         C TGA_
GAM3651 CA1
           3' TATGTCAGAAGCAGGGCTGTGT 82492
                   TATGTCAG AGC GTGT
```

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ATACAGTC TCG CACA
                       T TCCCGA
GAM3651 CASP10 3' TGCAGAGCAGCTGAGTGT 82493
                                         C
                    TGT AGCAGCTGAGTGT
                    ACG TCGTCGACTCACA
                     TC
GAM3651 CASP10 3' TGCAGAGCAGCTGAGTGT 82493
                                         С
                    TGT AGCAGCTGAGTGT
                    ACG TCGTCGACTCACA
                     TC
GAM3651 CASP2 3' TATGCCAGCTGGAAGTGT 82494
                                           AGCT
                    TATGTCAGC GAGTGT
                    ATACGGTCG TTCACA
                        ACC
GAM3651 CASP2 3' TATGCCAGCTGGAAGTGT 82494
                                           AGCT
                    TATGTCAGC GAGTGT
                    ATACGGTCG TTCACA
                        ACC_
GAM3651 CHES1 3' TGTAAAACAGCTGAGTGT 82495
                                        С
                    TGT AGCAGCTGAGTGT
                    ACA TTGTCGACTCACA
                     TT
GAM3651 HBD
            5' TATGTCAGAAGAAGTGT 82496
                                         C CT
                    TATGTCAG AG GAGTGT
                    ATACAGTC TC TTCACA
                       T T_
GAM3651 ICAM1
            3' CATGACCGCTGAGTGT
                                       TCA A
                                 82497
                    TATG GC GCTGAGTGT
                    GTAC TG CGACTCACA
                      ___ G
GAM3651 PCMT1 3' ATCTGAACAGCTGAGTGT 82498
                    GTC AGCAGCTGAGTGT
                    TAG TTGTCGACTCACA
                      AC
GAM3651 SLC22A5 3' TATGTAGCCTCTGAGTGT 82499
                                         C AG
                    TATGT AGC CTGAGTGT
                    ATACA TCG GACTCACA
                      _{-} GA
            3' TATATCAGTGCAAAGTGT 82500
GAM3651 TEK
                                         CA T
                    TATGTCAG GC GAGTGT
```

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ATATAGTC CG TTCACA
                       A_ T
GAM3651 TRPS1 3' TATGTCAAAAAAGGAGTGT 82501 C CT
                    TATGTCAG AG GAGTGT
                    ATACAGTT TT CTCACA
                       T TC
GAM3651 CGI-01 3' CATGTAGCTGAGTGT
                               82502
                                       CAGC
                    TATGT AGCTGAGTGT
                    GTACA TCGACTCACA
GAM3651 CSMD1 3' TATGCCAGTAGACAAGGT 82503
                                           CCT
                    TATGTCAG AG TGAG GT
                    ATACGGTC TC GTTC CA
                       ΑТ
GAM3651 DKFZP434I092 3' CATGTCAGCAGAATCTGGT 82504
                    TATGTCAGCAG CTG GT
                    GTACAGTCGTC GAC CA
                         TTA _
GAM3651 FLJ12649 3' TATCTCAAGCCTGAGTGT 82505
                                        G _ AG
                    TAT TCA GC CTGAGTGT
                    ATA AGT CG GACTCACA
                     G T
GAM3651 KIAA0337 3' TATGTCAACGGGCAATGT 82506
                                          A TG
                    TATGTCAGC GC AGTGT
                    ATACAGTTG CG TTACA
                        CC
GAM3651 KIAA0905 3' TATATCAGCAGAAATAGTGT 82507
                                            CTG
                    TATGTCAGCAG AGTGT
                    ATATAGTCGTC TCACA
                         TTTA
GAM3651 KIAA1841 3' TACGTGTAAACTGAGTGT 82508
                                         CAGC
                    TATGT AGCTGAGTGT
                    ATGCA TTGACTCACA
                      CAT
                                          _ CTGA
GAM3651 KIAA1958 5' CATGTCAAACAGGGTGT 82509
                    TATGTCAG CAG GTGT
                    GTACAGTT GTC CACA
                       T C_
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GAM3651 KIAA1958 3' TATGTCAATGACTAGTGT 82510

TATGTCAG GCT AGTGT

CA G

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ATACAGTT TGA TCACA
                        AC _
GAM3651 MDS033 3' ATGTCAGCAGAGAACGT 82511
                                            CT
                     ATGTCAGCAG GAGTGT
                     TACAGTCGTC CTTGCA
                         T_
GAM3651 MGC14859 3' TATGGCAGCGGCCACTGT 82512 T A AG
                     TATG CAGC GCTG TGT
                     ATAC GTCG CGGT ACA
                      C C G
GAM3651 MGC4368 3' TATGCTGAAGCTGAGTGT 82513
                                           CAGC
                     TATGT AGCTGAGTGT
                     ATACG TCGACTCACA
                       ACT
                                          GC G
GAM3651 TBC1D2 5' ATGTCAGCATGATGT 82514
                     ATGTCAGCA TGA TGT
                     TACAGTCGT ACT ACA
GAM3651 LOC120114 3' TATGTCATCAGAAACTGT 82515
                                         G CT G
                     TATGTCA CAG GA TGT
                     ATACAGT GTC TT ACA
                       A T G
GAM3651 LOC151304 3' TATGTCAGCATGCCGAGT 82516
                     TATGTCAGCA GCTGAGT
                     ATACAGTCGT CGGCTCA
GAM3651 LOC158314 3' CATGTCAGCAGCGTGT
                                             TGA
                                   82517
                     TATGTCAGCAGC GTGT
                     GTACAGTCGTCG CACA
GAM3651 LOC222865 3' TATGTCAGTGGCTGGACTGT 82518
                                              CA G
                     TATGTCAG GCTG A TGT
                     ATACAGTC CGAC T ACA
                        AC CG
GAM3651 LOC90321 3' TATGCCAGCAGTTAAATGT 82519
                                              C
                     TATGTCAGCAG TGAGTGT
                     ATACGGTCGTC ATTTACA
                         Α
GAM3651 LOC92080 3' TATGCCAGAAATGAGTGT 82520
                                            CC
                     TATGTCAG AG TGAGTGT
```

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ATACGGTC TT ACTCACA
                       _ T
GAM3652 COX15 3' AGGTCACAGAAACTT 82523 CCAT CT
                    AGG TC GCAGAAACTT
                    TCC AG TGTCTTTGAA
GAM3652 TAX1BP1 3' CAAGGTCAACAGAAACTT 82524
                                         C TTCCT
                    TAAGG CA GCAGAAACTT
                    GTTCC GT TGTCTTTGAA
                      Α
GAM3652 UPF3B 3' TAAGGCCATCTGGACT 82525
                                        TC CAGAA
                    TAAGGCCAT CTG ACT
                    ATTCCGGTA GAC TGA
                       С
GAM3652 UPF3B 3' TAAGGCCATCTGGACT
                                82525
                                        TC CAGAA
                    TAAGGCCAT CTG ACT
                    ATTCCGGTA GAC TGA
                       __ C___
GAM3652 ZNF217 5' TAAGGCCACTTGTAAGA 82526
                                         CC C
                    TAAGGCCATT TG AGA
                    ATTCCGGTGA AT TCT
                        AC
GAM3652 CTPS2 3' TAAGGCCAGTTCCTGGAA 82527
                                            CA
                    TAAGGCCA TTCCTG GAA
                    ATTCCGGT AAGGAC CTT
                       С
GAM3652 DKFZP564C1940 3' TAAGGCCACTTTTGGGTAGA 82528
                                                CC C
                    TAAGGCCATT TG AGA
                    ATTCCGGTGA AC TCT
                        AA CCA
GAM3652 FLJ10846 3' TAAGACCATTCAGCCAAGA 82529
                                           CT __
                    TAAGGCCATTC GC AGA
                    ATTCTGGTAAG CG TCT
                        T_ GT
```

GAM3652 FLJ12700 3' CAAGGCCATCCGGAGACTT 82530

GAM3652 FLJ14564 3' GGCCATGCAGAAAGGACTT 82531

TAAGGCCATTC GA ACTT

GTTCCGGTAGG CT TGAA

GGCCA TGCAGAA ACTT

C____ C

CTGCA A

TTCC

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CCGGT ACGTCTT TGAA
                            TCC
GAM3652 FLJ25415 3' AGGTTTATTCCTGCATTCTT 82532
                                         CC
                                               GAAA
                    AGG ATTCCTGCA CTT
                    TCC TAAGGACGT GAA
                     AAA
                            AA
GAM3652 MAEA 3' CAAGGCCTCTGCAGAAA 82533
                                         ATTC
                    TAAGGCC CTGCAGAAA
                    GTTCCGG GACGTCTTT
GAM3652 RNF29 3' GGCTATTTTTGCAGAAATCCT 82534
                                        C CC
                    GGC ATT TGCAGAAA CTT
                    CCG TAA ACGTCTTT GGA
                     A AA
                            Α
GAM3652 LOC150406 3' AGGCTATACAGGACAGAAACTT 82535 C TCCT
                    AGGC AT GCAGAAACTT
                    TCCG TA TGTCTTTGAA
                      A TGTCC
GAM3653 LAMP1 3' TCTCTACTGTTGTAATGT 82538 AACATAA
                    TCTCTAT TTGTAATGT
                    AGAGATG AACATTACA
                       AC
GAM3653 CDC14A 3' TCTCCATAACATAGTTTCAGTG 82539
                                            A GTAAT
                    TCTCTATAACATA TT GTG
                    AGAGGTATTGTAT AA CAC
                         C AGT__
GAM3653 CYorf15B 3' TCTTTAAACATAATTGTA 82540 C T
                    TCT TA AACATAATTGTA
                    AGA AT TTGTATTAACAT
                     Α_
GAM3653 KIAA1155 3' TCCATAATTCTGTAATGTG 82541
                                          CATAA
                    TCTATAA TTGTAATGTG
                    AGGTATT GACATTACAC
                       AA
GAM3653 LOC163404 3' TCTTTTAACATAATTGCAATG 82542
                                          CTA
                    TCT TAACATAATTGTAATG
                    AGA ATTGTATTAACGTTAC
                     AA_{-}
                                            A_ CC C
GAM3654 ADCY7 3' CTGCTGCTCCCGCCTTCTTGC 4733
                    TTGCTGCT CTGCC TCT GC
```

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GG A_ A
GAM3654 BMP1 3' TCCTGCTGACATTCCCTCTTGC 82545 CT TGC C
                   TCTTGCTG AC CCCTCT GC
                   AGGACGAC TG GGGAGA CG
                      __ TAA A
GAM3654 CASP4 5' TCCTGCCATACGTTGCTTCTCT 82546 C __ CC C
        TGC
                     TCTTGCTG TAC TGC CTCT GC
                   AGGACGGT ATG ACG GAGA CG
                      CA AA A
GAM3654 CREBL2 5' TCTGGCTGCCTCCTCTCGC 82547 T
                                            ACTG
                   TCT GCTGCT CC CCTCTCGC
                    AGA CGACGG GG GGAGAGCG
                     C A A
GAM3654 DBCCR1 5' TCTCGCTGTTGCTCGCTCG 82548
                                         CTAC CCCT
                   TCTTGCTG TGC CTCG
                   AGAGCGAC ACG GAGC
                      A___ AGC_
GAM3654 ERBB2IP 3' TCTTGCTGTCTTCCCCGCT 82549
                                         CTA G T
                   TCTTGCTG CT CCCC CT
                    AGAACGAC GA GGGG GA
                      A A C
                                       _ CTAC C
GAM3654 IHPK2 5' TTGTCCGTGTGTCCCTCTCG 82550
                   TTG CTG TG CCCTCTCG
                    AAC GGC AC GGGAGAGC
                     A AC_ A
GAM3654 LDHB 5' TCTGGCTGCTGCCCCTCTTGC 82551 T ACT
                                                 С
                   TCT GCTGCT GCCCCTCT GC
                    AGA CGACGA CGGGGAGA CG
                     C C__ A
GAM3654 MDS1 5' TCTTTTGCTCTCCCTCTCG 82552 GC A GC
                   TCTT TGCT CT CCCTCTCG
                    AGAA ACGA GA GGGAGAGC
GAM3654 PCDH7 5' TCCTGCTGCTGCTGCTACT 82553
                                          A CC
                   TCTTGCTGCT CTGC CT
                    AGGACGACGA GACG GA
                       C AT
GAM3654 PCDH7 5' TCCTGCTGCTGCTGCTACT 82553
                                          A CC
                   TCTTGCTGCT CTGC CT
```

GACGACGA GGCGG AGACG

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C AT
GAM3654 PCDH7 5' TCCTGCTGCTGCTGCTACT 82553
                                            A CC
                    TCTTGCTGCT CTGC CT
                    AGGACGACGA GACG GA
                        C AT
                                           CTA CCC C
GAM3654 S100B 3' CCTTGCTGTCTGCTTTCTTGC 82554
                    TCTTGCTG CTGC TCTGC
                    GGAACGAC GACG AGACG
                       A AA A
GAM3654 ST3GALVI 5' TCCAGCCGGCTGCTGCCTCTCT 82555
                                           T _ A C
        CGC
                      TCT GCTG CT CTGCC CTCTCGC
                    AGG CGGC GA GACGG GAGAGCG
                      T C C A
GAM3654 DKFZP566D1346 5' TCTTCCTCTTGCTCCTCTCGC 82556 G G AC C
                    TCTT CT CT TGC CCTCTCGC
                    AGAA GA GA ACG GGAGAGCG
                      G _ _ A
GAM3654 EPB41L1 3' TCTTGCTGCTGTGACTTCTCTT 4742
                                             ACT CC C
                      TCTTGCTGCT GC CTCTGC
        GC
                    AGAACGACGA TG GAGA CG
                        CAC AA A
GAM3654 FLJ10846 5' TCTGCTGCTGCTGCTTCTGC 82557 T
                                             A CCC C
                    TCT GCTGCT CTGC TCT GC
                    AGA CGACGA GACG AGA CG
                         C A
GAM3654 FLJ13964 5' TCTTGCTGTTACTTCCC 82558
                                          C GC
                    TCTTGCTG TACT CCC
                    AGAACGAC ATGA GGG
                        A A_
GAM3654 KIAA0040 5' TCTGGCTGCTGGCCCCTCTTGC 82551
                                           T ACT
                                                     С
                    TCT GCTGCT GCCCCTCT GC
                     AGA CGACGA CGGGGAGA CG
                      С
                         C___
                              Α
GAM3654 KIAA0446 3' TTGCTGCTCCTGCTCCCT 4748
                                           Α
                    TTGCTGCT CTGC CCCT
                    AACGACGA GACG GGGA
                        G A
GAM3654 KIAA0844 5' TTGCTGCTGCTGCAGCCGC 82559
                                            A CCCTC
                    TTGCTGCT CTGC TCGC
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AGGACGACGA GACG GA

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C TC___
GAM3654 KIAA1028 3' TCTGCTGCTGTTGCTGATTCT 82560 T AC CCC
                     TCT GCTGCT TGC TCT
                     AGA CGACGA ACG AGA
                         CA ACTA
GAM3654 SYNE-2 5' TTGCTCGCTCTCCCTCTCGC 82561
                                            _ A GC
                     TTGCT GCT CT CCCTCTCGC
                     AACGA CGA GA GGGAGAGCG
                       G _ _
GAM3654 LOC201771 5' TGCTTCTGGCTCCTCTCGC 82562
                                            A C
                     TGCT CTG C CCTCTCGC
                     ACGA GAC G GGAGAGCG
                       A CA
                                             AC CCCC C
GAM3654 LOC202284 5' CTGCTGCTGTGGAGTCTTGC 82563
                     TTGCTGCT TG TCT GC
                     GACGACGA AC AGA CG
                        C_ CTC_ A
                                               CTAC CT
GAM3654 LOC221954 3' TCTTGCTGTGTTGCCCACACT 82564
                     TCTTGCTG TGCCC CT
                     AGAACGAC ACGGG GA
                        ACA_ TGT
GAM3654 LOC90495 3' TCTTTTGCTCACTGCCCTCT 82565
                                            GC _
                                                   С
                     TCTT TGCT ACTGCCC TCT
                     AGAA ACGA TGACGGG AGA
                       A_{\underline{}} G
GAM3654 LOC91960 5' CTGCTGGACGGCCTCCTCTCGC 82566
                                               CT T
                     TTGCTG AC GCC CCTCTCGC
                     GACGAC TG CGG GGAGAGCG
                        C_ C A
GAM3655 ADAMTS5 3' AATATACTTAGATTTTTTA 82569
                                           GA
                     AATAT ACTTAGATTTTTTA
                     TTATA TGAATCTAAAAAAT
GAM3655 EGFL5 5' TAAAATATGACATGATTTTTT 82570
                                             ACTTA
                     TAAAATATGA GATTTTTT
                     ATTTTATACT CTAAAAA
                         GTA__
                                                    \mathsf{TT}_{-}
GAM3655 ARHGAP11A 3' TAAAATATAAATTTAGACAGAT 82571
                                                С
         TTA
                      TAAAATATGAA TTAGAT TTTA
```

AACGACGA GACG GGCG

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TCT
GAM3655 KIAA0826 5' AATATGAACTGATTTTT
                                           TA
                                 82572
                    AATATGAACT GATTTTT
                    TTATACTTGA CTAAAAA
GAM3655 LOC149086 3' AAATATGTCTAGATTTTTTA 82573
                                            AAC
                    AAATATG TTAGATTTTTTA
                     TTTATAC GATCTAAAAAAT
GAM3656 AP1B1 3' TGAGGAATGTATCACAGGCAGT 82576
                                             A A CAA
                    TGAGGAAT TA TATAG CAGT
                    ACTCCTTA AT GTGTC GTCA
                        CAC_
GAM3656 COPA 3' TGAGAAATATGAGAACAATAGT 82577
                                             AATAT C
                    TGAGGAATAT AGCAA AGT
                    ACTCTTTATA TTGTT TCA
                        CTC__ A
GAM3656 OLIG2 3' TGAGGAATGCACACAGC
                                          ATA
                                  82578
                    TGAGGAAT ATATAGC
                     ACTCCTTA TGTGTCG
                        CG
                                           AATATA __
GAM3656 PAIP2 3' TGAGAAATATGCTTAACAG 82579
                    TGAGGAATAT GC AACAG
                     ACTCTTTATA
                               CG TTGTC
                             AA
GAM3656 TCTA 3' GAGGAATATGAGTAGGACAGT 82580
                                            AATA CA
                     GAGGAATAT TAG ACAGT
                     CTCCTTATA ATC TGTCA
                        CTC_ C_
GAM3656 FLJ10517 3' TGAAGAATGTAATGAACAG 82581
                                           A ATAGC
                     TGAGGAAT TAAT AACAG
                     ACTTCTTA ATTA TTGTC
                        C C_
GAM3656 FLJ23550 3' TGAGGAATATTAATACGATGAC 82582
                                                 AGCA
        AGT
                      TGAGGAATAT AATAT ACAGT
                     ACTCCTTATA TTATG TGTCA
                        A CTAC
GAM3656 PRO0149 5' TGAGGAACTGTAATAATAATAG 82583
                    TGAGGAAT ATAATA TAG
```

ATTTTATATTT AATCTG AAAT

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ACAT
                             Т
GAM3656 LOC170063 3' TGAGGAATATGCTTCAACAGT 82584
                                              AATATAG
                    TGAGGAATAT
                                CAACAGT
                    ACTCCTTATA
                                GTTGTCA
                        CGAA
GAM3656 LOC51191 3' TAAGGAATATGATGTAGGCA 82585
                                             A A _
                    TGAGGAATAT AT TAG CA
                    ATTCCTTATA TA ATC GT
                        CCC
GAM3657 DKFZp761K1824 3' ATTATTGGTGATAAATCATTAA 82588
                                                ATA
                    ATTATTG ATAAATCATTGA
                    TAATAAC TATTTAGTAATT
                       CAC
GAM3657 KIAA1043 3' TACTATTGATAATAAAACCA 82589
                    TATTATTGATAATAAA TCA
                    ATGATAACTATTATTT GGT
                           Т
             3' TAATGATCAATAGATCATTGA 82590 T _ A
GAM3657 RERG
                    TA TGAT AATA ATCATTGA
                    AT ACTA TTAT TAGTAACT
                     TGC
GAM3658 ADAM11 3' GGGTGGGGACGTGGGCAGGGG 82593
                                            GAA ATG
                    GGG GGAC GGGCAGGGG
                    CCC CCTG CCCGTCCCC
                     ACC CA
GAM3658 ADCY6 3' CAGGGGAAGGGCATGGCTGG 82594
                                             A GGCAG
                    TAGGGGAAGG CATGG GG
                    GTCCCCTTCC GTACC
                        C GA
GAM3658 ADCY6 3' CAGGGGAAGGGCATGGCTGG 82594
                                                GGCAG
                    TAGGGGAAGG CATGG GG
                    GTCCCCTTCC GTACC
                                     CC
                        C GA
GAM3658 AR
           5' GGGGAAGGCAGGGTGGGGG 82595
                                           A T GCA
                    GGGGAAGG CA GGG GGGG
                    CCCCTTCC GT CCC CCCC
                       _ _ AC_
GAM3658 ARHG
             3' GGGGGGAGGCAGGG
                                 82596
                                        AA CATG
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GGGG GGA GGGCAGGG

ACTCCTTG TATTAT ATC

CCCC CCT CCCGTCCC

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GAM3658 ARHG 3' GGGGGGGGGGCAGGG 82596 AA CATG
                   GGGG GGA GGGCAGGG
                   CCCC CCT CCCGTCCC
GAM3658 ARHG 3' GGGGGGAGGCAGGG
                                82596
                                      AA CATG
                   GGGG GGA GGGCAGGG
                   CCCC CCT CCCGTCCC
GAM3658 ATRN
           3' TAGGGTGACACGGGGGTGGGG 82597 GAAG
                                                 CA
                   TAGGG GACATGGGG GGGG
                   ATCCC CTGTGCCCC CCCC
                     Α
                           CA
GAM3658 AVP 5' TAGGAGCTGTGGGGCAGGG 82598
                                        AAGGACA
                   TAGGGG TGGGGCAGGG
                   ATCCTC ACCCCGTCCC
                      GAC
GAM3658 BRF1
            3' GGAGGAGGCAGGGGTGGGGG 82599 A A T CA
                   GGGG AGG CA GGGG GGGG
                   CCTC TCC GT CCCC CCCC
                     \mathsf{C} _ _ AC
GAM3658 CALM3 3' AGGGGAAGCAGGGGGTGGGGG 82600
                                         GA T CA
                   AGGGGAAG CA GGGG GGGG
                   TCCCCTTC GT CCCC CCCC
                      __ C AC
GAM3658 CARKL 5' CAGGGGGGGGGGGGAGGG 82601
                                         AA ACA
                   TAGGGG GG TGGGGCAGGG
                   GTCCCC CC GCCCCGTCCC
GAM3658 CENTD2 5' GGGGGAGGGTGGACAGGG 82602
                                         A ACATG
                   GGGG AGG GGGCAGGG
                   CCCC TCC CCTGTCCC
                     C CA__
GAM3658 CLTCL1 3' TAGGGGAAGCTGGCAGGG 82603
                                          GACATGG
                   TAGGGGAAG GGCAGGG
                   |||||||
                   ATCCCCTTC
                              CCGTCCC
                       \mathsf{GA}_{\_}
GAM3658 COL5A3 3' GGGGAGGTGAGGGGCAGGGG 82604 A ACAT
                   GGGGA GG GGGGCAGGGG
```

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CCCCT CC CCCCGTCCCC
                     _ ACT_
GAM3658 DOK1 3' AGGGAAGGGATGGCTTTGGGG 82605
                                         AC GGCA
                   GGGGAAGG ATGG GGGG
                   TCCCTTCC TACC CCCC
                      C GAAA
GAM3658 DRPLA 3' GGGGGAGGAGAAAAGCAGGGG 82606 A CAT
                   GGGG AGGA GGGGCAGGGG
                   CCCC TCCT TTTCGTCCCC
                     C CT
GAM3658 DVL3 3' AGGGCAGGCATGGGGCAGGGG 82607
                                        АА
                   GGGG AGG CATGGGGCAGGGG
                   TCCC TCC GTACCCCGTCCCC
GAM3658 EGR3 3' AGGGGAAGGAGTGGGAGGGCAG 82608
                                           CAT
        GGG
                     AGGGGAAGGA GGGGCAGGGG
                   TCCCCTTCCT TCCCGTCCCC
                       CACCC
GAM3658 ELAVL3 3' GGGGGCAGGAGGATGGGGCGGG 82609 A_ C_ A III
        GGC
                     GGG AGGA ATGGGGC GGGG C
                   CCC TCCT TACCCCG CCCC G
                    CG CC C III
GAM3658 ENTPD2 3' GGGGGAGGGATGGGGCAG 82610 A AC
                   GGGG AGG ATGGGGCAG
                   CCCC TCC TACCCCGTC
                     C
GAM3658 FE65L2 3' CAGGGGGAGGGCAGG 82611
                                       AAG CAT
                   TAGGGG GA GGGGCAGG
                   GTCCCC CT CCCCGTCC
GAM3658 FE65L2 3' CAGGGGGAGGGCAGG
                                       AAG CAT
                                82611
                   TAGGGG GA GGGGCAGG
                    111111 11 11111111
                    GTCCCC CT CCCCGTCC
GAM3658 FXR2
            3' GGGAGGAGGATAGCAGGGG 82612 A CAT ____
                   GGGA GGA GGG GCAGGGG
```

_ ___ TAT

GAM3658 JTB 5' GGAGGAAGGGCCGGCGGGG 82613 _ ACATGG A

GG GGAAGG GGC GGGG

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CCCT CCT CCC CGTCCCC

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CC CCTTCC CCG CCCC
                    T CGG C
GAM3658 JUNB 3' AGGGGAGGGCAGGGGGGGGGG 82614
                                           AAT A
                   AGGGGA GG CA GGGGC GGGG
                   TCCCCT CC GT CCCCG CCCC
                     C
GAM3658 KCNJ4 3' GGGGAAGGGTGGTGGATCCGGG 82615
                                           ACA_ GCA
                    GGGGAAGG TGGG GGGG
        G
                   CCCCTTCC ACCT CCCC
                      CACC AGG
GAM3658 KRT17 3' GGGGAAGGGACTGAAGCAGGGG 82616
                                           _ A
                   GGGGAAGG AC TGGGGCAGGGG
                   CCCCTTCC TG ACTTCGTCCCC
                      С
GAM3658 LAMB2 3' GGGGTAGGCCTTGGGCAGGGG 82617
                                         A ACATG
                   GGGG AGG GGGCAGGGG
                   CCCC TCC CCCGTCCCC
                     A GGAA
GAM3658 LYAAT1 3' GGGGACACATGGGGCAGGGG 82618
                                         AGG
                   GGGGA ACATGGGGCAGGGG
                   CCCCT TGTACCCCGTCCCC
                     G
           3' GGGGGTGGGAGCGCAGGGG 82619
                                        AA ACAT
GAM3658 MB
                   GGGG GG GGCAGGGG
                   CCCC CC TC CCGTCCCC
                     CA C___ G
GAM3658 MPP2
            3' GGGGAGGGTGGCAGGG 82620
                                       A ACAT
                   GGGGA GG GGCAGGG
                   CCCCT CC CC CCGTCCC
           3' GGGGCAGCAGGCAGGG 82622
GAM3658 MSI1
                                       AA A TG
                   GGGG GG CA GGGCAGGG
                   CCCC TC GT CCCGTCCC
                     CG _ _
                                        _ ACA C
GAM3658 MSI1
           3' GGGGCAAGGGCGAAGAGGGG 82621
                   GGGG AAGG TGGGG AGGGG
                   CCCC TTCC GCTTC TCCCC
                     G C___
GAM3658 NEFH
            3' GGGGAGGCATGGGGGCAGGGG 82623
                                          ΑА
                   GGGGA GG CATGGGG CAGGGG
```

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CCCCT CC GTACCCC GTCCCC
                     C _ C
GAM3658 NGFR 3' GGGGTGGGGGGCAAGAG 82624 AA ACAT
                   GGGG GG GGGCAGGGG
                   CCCC CC CCCGTTCTC
                     A_ __
GAM3658 NHLH1 3' GGGAAAGGATATGGTGTGG 82625
                                      C GGCAG
                   GGGGAAGGA ATGG GG
                   CCCTTTCCT TACC CC
                      A ACA
GAM3658 NKX2H 5' AGGGGAAGGAGGCGGGG 82626
                                         CATGG A
                   AGGGAAGGA GGC GGG
                   TCCCCTTCCT CCG CCC
                        С
GAM3658 PACSIN1 3' GGAGGAAGGGAAGCAGGGCAGG 82627
                                          _ ACAT_
        GG
                    GG GGAAGG GGGGCAGGGG
                   CC CCTTCC TCCCGTCCCC
                    T CTTCG
GAM3658 PKM2 3' GGGGAAGGGGTGGGACAGGGG 82628
                                           ACA
                   GGGGAAGG TGGGGCAGGGG
                   CCCCTTCC ACCCTGTCCCC
                      CCC
GAM3658 PLA2G2D 3' GGGAGAGGTGGGGCAGGGG 82629
                                         GA ACA
                   GGG AGG TGGGGCAGGGG
                   CCC TCC ACCCCGTCCCC
                    TC
GAM3658 POU3F1 3' GGGGGGGCAGGGGCGGGG 82630
                                        AA A T A
                   GGGG GG CA GGGGC GGG
                   CCCC CC GT CCCCG CCC
                     C_ _ _ C
GAM3658 PRKACG 3' AGGAAGGCATGGGGCGGGG 82631
                                          A A
                   GGGAAGG CATGGGGC GGGG
                   TCCTTCC GTACCCCG CCCC
                         С
GAM3658 PTGDS 3' GGGGAGCCGGGGCAGGGG 82632
                                        AGGACA
                   GGGGA TGGGGCAGGGG
                   CCCCT
                         GCCCCGTCCCC
                     CG_{-}
GAM3658 PTPRG 5' AGGGGAGGGGAGAGGCAGGGG 82633
                                          A ACAT
```

AGGGGA GG GGGCAGGGG

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TCCCCT CC CTCCGTCCCC
                     C CT_
GAM3658 RAB4A 5' GGGGAAGGGCCTGGGGCGGGGG 82634
                                           ACA A
                   GGGGAAGG TGGGGC GGGG
                   CCCCTTCC ACCCCG CCCC
                      CGG
                          C
GAM3658 S100A5 3' AGGGAGAGGGGGCAGGGG 82635
                                        GA CATG
                   AGGG AGGA GGGCAGGGG
                   TCCC TCCT CCCGTCCCC
                     TC
GAM3658 SDC4 3' AGGGGAAGGGCACTGGGG 82636
                                         Α_
                   AGGGAAGG CA TGGGG
                   TCCCCTTCC GT ACCCC
                      CG
GAM3658 SLC8A2 3' TAGGGGAAGGGAGACTTTGGGG 82637
                                           ACAT A
                   TAGGGGAAGG GGGGC GGGG
                   ATCCCCTTCC CTCTG CCCC
                           AAA
GAM3658 SNRP70 3' GGGGGAGGGGATGACAGCAAGG 82638
                                          A AC
                    GGGG AGG ATGG GGCAGGGG
        G
                   CCCC TCC TACT TCGTTCCC
                     C CC G
GAM3658 SOLH 3' AGGGGAAGGAGGGGGGGGGGG 82639
                                            CAT A
                   AGGGAAGGA GGGGC GGGG
                   TCCCCTTCCT CCCCG CCCC
                       CC_ C
GAM3658 SOX10 3' GGGGGCAGGGGCTGGGCGGGGG 82640
                                          A ACATG A
                   GGGG AGG GGGC GGGG
                   CCCC TCC CCCG CCCC
                     CG CCGA C
GAM3658 TAF4
           3' AGGGGAGGGGAGGGCAGGGG 82641
                                         A ACAT
                   AGGGGA GG GGGGCAGGGG
                   TCCCCT CC TCCCGTCCCC
                     C C__
GAM3658 UBE2L3 3' GGAGGAGGGGGTCAGCAGGGG 82642
                                          A ACAT ___
                   GGGG AGG GGGGGGG
                   CCTC TCC CCC CGTCCCC
                     C ____ AGT
GAM3658 VASP 3' AGGGGAGTCCCTGGGGTGGGGG 82643
                                          A GACA CA
                   AGGGGAG TGGGG GGGG
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TCCCCT C ACCCC CCCC
                      _ AGGG AC
GAM3658 VTN
                                          C GC
            3' GGGGAAGGAGATGGGAGG 82644
                    GGGGAAGGA ATGGG AGG
                    CCCCTTCCT TACCC TCC
                        С
                                         CATG GC
GAM3658 YWHAE 3' AGGGGAAGGAGGTAGGG 82645
                    AGGGAAGGA GG AGGG
                    TCCCCTTCCT CC TCCC
GAM3658 7h3
           3' GGGGGGGGGCAAGG
                                82646
                                      AA ACAT
                    GGGG GG GGGCAGGG
                    CCCC CC CCCGTTCC
GAM3658 APELIN 3' GGGGAATGGTGCAGCAGGGG 82647
                                           ACA G
                    GGGGAA GG TG GGCAGGGG
                    CCCCTT CC AC TCGTCCCC
                       A ___ G
GAM3658 BCL2L1 3' GGAACAAGTGTGGGGTGGGGG 82648
                                           G CA CA
                    GGAA GA TGGGG GGGG
                    CCTT TT ACCCC CCCC
                      G CAC AC
GAM3658 C21orf57 5' GGGGAGGGACAGGAGAGGGG 82649
                                           A T C
                    GGGGA GGACA GGGG AGGGG
                    CCCCT CCTGT CCTC TCCCC
                      С
GAM3658 C22orf4 3' GGGGTGGGGACACGGAAGGCAG 82650
                                            AA_
        GGG
                      GGGG GGACATGG GGCAGGGG
                    CCCC CCTGTGCC CCGTCCCC
                      ACC
                            TT
GAM3658 Cab45 5' GGGAGGGGCAGGGGCAGGGG 82651
                                           AAT
                    GGGA GG CA GGGGCAGGGG
                    CCCT CC GT CCCCGTCCCC
                      C C ^-
GAM3658 Cab45 5' GGGAGGGGCAGGGGCAGGGG 82651
                                           AAT
                    GGGA GG CA GGGGCAGGGG
                    CCCT CC GT CCCCGTCCCC
                      \mathsf{C} \mathsf{C}
GAM3658 CASKIN1 3' GGGGGTGCGGTGGGGCAGGGG 82652
                                            AA__ ACA
                    GGGG GG TGGGGCAGGGG
```

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CCCC CC ACCCCGTCCCC
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GAM3658 CBX8 3' AGGGGCTGGTGGGGTGGGGG 82653 AA ACA CA
                   AGGGG GG TGGGG GGGG
                   TCCCC CC ACCCC CCCC
                     GA ___ AC
GAM3658 CENTG1 3' GGGGAAGGGGCAGGG
                                 82654
                                        GGACAT
                   GGGGAA GGGGCAGGG
                    CCCCTT CCCCGTCCC
GAM3658 CIC 3' GGGGAAGGGGCAAGGGCAGGG 82655
                                           ACAT
        G
                    GGGGAAGG GGGGCAGGGG
                   CCCCTTCC TCCCGTCCCC
                      CCCGT
GAM3658 CNNM2 3' GGGAGGAGGAGCAGG 82656 A CAT
                   GGGA GGA GGGGCAGG
                   CCCT CCT CCTCGTCC
GAM3658 CNTNAP1 3' GGGGAGAGGCAGGACTGGGG 82657 _ A TG A
                   GGGGA AGG CA GGGC GGGG
                   CCCCT TCC GT CCTG CCCC
                     C _ _ A
                                              GA A_ ___
GAM3658 DKFZp547M072 3' TAGGGCAGGGGCACTGAGAGGC 82658
        AGGGG
                      AGGG AGG CAT GGGGCAGGGG
                   TCCC TCC GTG CTCCGTCCCC
                     G_ CC ACT
GAM3658 DKFZP564O0423 3' GGAGGAGGGACAGGGCGTGGGG 82659 _ A TG A_
                   GG GGA GGACA GGGC GGGG
                   CC CCT CCTGT CCCG CCCC
                    T C _ CA
GAM3658 DKFZP586G1122 3' TAGGGGAGAGGGAAAGGCAGGG 82660
                                                ACAT
                    TAGGGGA AGG GGGGCAGGGG
                   ATCCCCT TCC TTCCGTCCCC
                      C CT_
GAM3658 DKFZP586G1122 3' AGGGGAGGACCGTGGGTGGGGG 82661 A ATG CA
                   AGGGGA GGAC GGG GGGG
                   TCCCCT CCTG CCC CCCC
                      _ GCA AC
GAM3658 DKFZP586N0721 5' GGGGAGCCCAGGGCAGGGG 82662 A GA TG
                   GGGGA G CA GGGCAGGGG
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CCCCT C GT CCCGTCCCC
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GAM3658 DMRTB1 3' TAGAGGAGGGCAAG 82663 AGGACAT
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                   ATCTCCT CCCCGTTC
GAM3658 DNAL4 3' GGGGAAGGGGTTTCTGAGGGG 82664 ACAT GGC
                   GGGGAAGG GG AGGGG
                   CCCCTTCC CC TCCCC
                      AAAGAC
GAM3658 DUSP9 3' GGGTGGGGGTGGGGCAGGGG 82665
                                        GAA ACA
                   GGG GG TGGGGCAGGGG
                   CCC CC ACCCCGTCCCC
                    AC CC
GAM3658 EPB41L1 3' AGGGTGAAGGGTGTGGGGTGGG 82666
                                         _ ACA CA
        GG
                    AGGG GAAGG TGGGG GGGG
                   TCCC CTTCC ACCCC CCCC
                    A CAC AC
                                82667 ACAT C
GAM3658 EPB41L1 3' GGGGAAGGGGAAGGG
                   GGGGAAGG GGGG AGGG
                   CCCCTTCC CCCT TCCC
GAM3658 FEM-2 3' GAGGAAGGGGAGGGCAGGGG 82668
                                         ACAT
                   GGGGAAGG GGGGCAGGGG
                   CTCCTTCC TCCCGTCCCC
                     CC
GAM3658 FLJ10374 3' GGGGGCAGGAGCAGGGG 82669 A CATGG
                   GGGG AGGA GGCAGGGG
                   CCCC TCCT TCGTCCCC
                    CG CG
GAM3658 FLJ10759 5' AGGGGGGCCCGAGGGGCAGGGG 82670 AA ACAT_
                   AGGGG GG GGGCAGGGG
                   TCCCC CC CCCGTCCCC
                     __ GGGCT
GAM3658 FLJ10829 3' GGGGAGGGGCAGGG
                               82671 A ACATG
                   GGGGA GG GGGCAGGG
                   CCCCT CC CCCGTCCC
                                           CATG _
GAM3658 FLJ11078 3' GGGGAAGGAGGCACCCCAGGG 82672
        G
                   GGGGAAGGA GGGCA GGGG
```

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CCCCTTCCT CCCGT CCCC
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GAM3658 FLJ12747 3' AGAGGGATTGGGGGCAGGGG 82673 A CAT
                     GGA GGA GGGGCAGGGG
                     TCT CCT CCCCGTCCCC
                      C AAC
GAM3658 FLJ14054 3' GGGTGGAGGGCAGAAG
                                   82674
                                          AA CAT
                     GGG GGA GGGGCAGGGG
                     CCC CCT CCCCGTCTTC
GAM3658 FLJ14326 3' GGGGAAGGGTGGGCACACAGGG 82675
                                               ACA ___
        G
                     GGGGAAGG TGGG GCAGGGG
                     CCCCTTCC ACCC TGTCCCC
                        C__ GTG
GAM3658 FLJ14596 3' GGGGTGGGGCAAAGTCAGGGG 82676
                                           AA A T GG
                     GGGG GG CA GG CAGGGG
                     CCCC CC GT TC GTCCCC
                      AC C T A_
GAM3658 FLJ14721 3' TAGGGGAAGGAACAGGGG 82677
                                               CAT
                     TAGGGGAAGGA GGGGCAGGGG
                     ATCCCCTTCCT CCTTGTCCCC
GAM3658 FLJ21324 5' GGGGAAGGTAGCGGGGTGGGGG 82678
                                               ACA CA
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                     CCCCTTCC GCCCC CCCC
                        ATC AC
GAM3658 FLJ22127 3' AGGGAAGGATATGTTGTGGG 82679
                                            C GGGCA
                     GGGGAAGGA ATG GGG
                     TCCCTTCCT TAC CCC
                        A AACA
GAM3658 FLJ23168 3' GGGAAAGGGTAGTTTTGGCAGG 82680
                                              ACATGG
        GG
                      GGGGAAGG
                                 GGCAGGGG
                     CCCTTTCC
                               CCGTCCCC
                        CATCAAAA
GAM3658 FN3K
            3' CAGGGGAAGGGAGGGCAGGGG 82681
                                              ACAT
                     TAGGGGAAGG GGGGCAGGGG
                     GTCCCCTTCC TCCCGTCCCC
                         \mathsf{C}_{\scriptscriptstyle{-}}
GAM3658 FOXO3A 5' AGGGGGGGGGGCCCCGGGG 82682
                                             A ACAT G A
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AGGGG AGG GG GC GGGG

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TCCCC TCC CC CG CCCC
                     C ___ G GG
                                      _ CAT GCA
GAM3658 FUK 3' GGGGCAAGGAAGGTGGGG 82683
                   GGGG AAGGA GGG GGG
                   CCCC TTCCT TCC CCC
                     G ___ AC_
GAM3658 GBTS1 3' GGGGGGAGAGGGGCAGGGG 82684
                                         AA CAT
                   GGGG GGA GGGGCAGGGG
                   CCCC CCT CCCCGTCCCC
                     CTC
                                         ACATGG ___
GAM3658 GIT2
           3' GGGGAAGGGTGGCATATGGGG 82685
                   GGGGAAGG GGCA GGGG
                   CCCCTTCC CCGT CCCC
                      CA ATA
GAM3658 GIT2 3' GGGGAAGGGTGGCATATGGGG 82685
                                         ACATGG __
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                        CCCCTTCC CCGT CCCC
                      CA____ ATA
                                        ACATGG ___
GAM3658 GIT2 3' GGGGAAGGGTGGCATATGGGG 82685
                   GGGGAAGG GGCA GGGG
                   CCCCTTCC CCGT CCCC
                      CA____ ATA
GAM3658 GTPBG3 3' TAGGGGAAGGGAAGG 82686
                                        GGACAT C
                   TAGGGGAA GGGG AGG
                   ATCCCCTT CCCC TCC
                            Т
GAM3658 HMT-1 3' GGGAAGGACAGCAGGG
                                        TGGG
                               82687
                   GGGAAGGACA GCAGGG
                   CCCTTCCTGT CGTCCC
GAM3658 HOMER-2B 3' GGGGGGGGGGGGGGGGGG 82688 AA ACAT
                   GGGG GG GGGCAGGGG
                   CCCC CC CCCGTCCCC
                    C_ GCC_
GAM3658 KIAA0057 3' GGGCGGGCAAGGGGTAGGGG 82689
                                        AA A T C
                   GGG GG CA GGGG AGGGG
                   CCC CC GT CCCC TCCCC
                    GC _ T A
GAM3658 KIAA0227 3' GGGGAAGGAGGCAGGG
                                82690
                                         CATGG
                   GGGGAAGGA GGCAGGG
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CCCCTTCCT CCGTCCC

GAM3658 KIAA0284 3' TAGGGGGCGAGGCAGGGTGGG 82691 A A T CA GG TAGGGG AGG CA GGGG GGGG ATCCCC TCC GT CCCC CCCC CGC _ _ AC GAM3658 KIAA0545 3' GGGGGTGAGGGTGGGGGCAGGG 82692 A_ ACAT GGGG AGG GGGGCAGGGG G CCCC TCC CCCCGTCCCC CAC CAC GAM3658 KIAA0557 3' AGGGGGGGGGGGAGCAGGTGG 82693 AA ACAT AGGGG GG GGGCAGG GG TCCCC CC CCTCGTCC CC GAM3658 KIAA0595 3' TAGGGGAAGGGGGTGGAG 82694 ACAT GCA TAGGGGAAGG GGG GGG ATCCCCTTCC CCC CTC ____ AC_ GAM3658 KIAA0939 3' GGGGATGGGATGGGCAGGGG 82695 A AC GGGGA GG ATGGGGCAGGGG CCCCT CC TACCCCGTCCCC A C GAM3658 KIAA1054 3' AGGGGAGGGGGGGGGGGGG 82696 A ACAT AGGGGA GG GGGCAGGGG TCCCCT CC CTCCGTCCCC СС GAM3658 KIAA1110 3' GGGGAAGGACATGGTCAGG 82697 GG GGGGAAGGACATGG CAGG CCCCTTCCTGTACC GTCC A_{-} GAM3658 KIAA1238 5' GGGGAAGGAGGAGGG 82698 CAT C GGGGAAGGA GGGG AGGG CCCCTTCCT CTCC TCCC GAM3658 KIAA1543 3' GGGGGAGGACAGACAAGGG 82699 Α TGG GGGG AGGACA GGCAGGGG CCCC TCCTGT CTGTTCCC С GAM3658 KIAA1706 3' GGGGAAGGGGGGGGG 82700 ACATG A GGGGAAGG GGGC GGG

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CCCCTTCC CCCG CCC
                       _ C
GAM3658 KIAA1719 3' GGGGAAAGGGTAGAGGG 82701
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                   GGGGAAGG GG GG AGGG
                   CCCCTTTC CC TC TCCC
                      ____ A _
GAM3658 KIAA1813 5' GGGGAAGGGACTTCTTAGGGG 82702
                                           _ ATGGGGC
                   GGGGAAGG AC
                               AGGGG
                   TCCCC
                   CCCCTTCC TG
                      C AAGAA
GAM3658 KIAA1887 5' GGGGGACAGGAGCAGGG 82703
                                       AA T
                   GGG GGACA GGGGCAGGG
                   CCC CCTGT CCTCGTCCC
GAM3658 KIAA1938 3' GGGGAGGGAAGCAGAGGGGCGG 82704
                                           A __ T_ A
        GGG
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                   CCCCT CCT GT CCCCG CCCC
                     C TC CT C
GAM3658 KIAA1940 3' AGGGGCTGGTGGGGCAGGGG 82705
                                          AA ACA
                   AGGG GG TGGGGCAGGG
                   TCCCC CC ACCCCGTCCCC
                     GA
GAM3658 MGC10882 3' AGGGGAGTGGGATGGGGTGGGG 82706
                                           A CA CA
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                    AGGGGA GGA TGGGG GGGG
                   TCCCCT CCT ACCCC CCCC
                      CAC AC
GAM3658 MGC10924 3' AGGGGGGTGGGGGTGGGG 82707 AA ACA CA
                   AGGGG GG TGGGG GGGG
                   TCCCC CC ACCCC CCCC
                      __ __ CA
GAM3658 MGC14832 3' TAGGGGAAAGAGGCAGGG 82708
                                            CATGG
                   TAGGGGAAGGA GGCAGGG
                    ATCCCCTTTCT CCGTCCC
GAM3658 MGC21621 3' GGGTGGGGGAGCCGGGCAGGGG 82709
                                            GAA_ CATG
                   GGG GGA GGGCAGGGG
                    CCC CCT CCCGTCCCC
                    ACCC CGG_
GAM3658 MIDORI 3' AGGGGAGGTTCCGGGTGGGGG 82710 A ACA GCA
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AGGGGA GG TGGG GGGG

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TCCCCT CC GCCC CCCC
                     _ AAG AC_
GAM3658 NCKX3 3' GGGGAGCGAGGATGGGGCAGGG 82711
                                           ___ CA
        G
                    GGGGA AGGA TGGGGCAGGGG
                   CCCCT TCCT ACCCCGTCCCC
                     CGC
GAM3658 NOL4 5' GGGGAAGGGGATGGGAAGAGGGG 82712
                                           AC C_
                   GGGGAAGG ATGGGG AGGGG
                   CCCCTTCC TACCCT TCCCC
                      C TC
GAM3658 P5CR2 5' TAGGGGAAGGGCGGACAGCGCA 82714
                                          AC__ G
        GGGG
                      TAGGGGAAGG ATGG GCAGGGG
                   ATCCCCTTCC TGTC CGTCCCC
                       CGCC G
GAM3658 P5CR2 3' GGTGGGAGCGGGCAGGG 82713 GAA CA
                   GG GGA TGGGGCAGGG
                   CC CCT GCCCCGTCCC
                    AC_ C_
GAM3658 PAK7 5' TAGGGGCAAGGGGGGGGGGG 82715
                                          _ ACAT A
                   TAGGGG AAGG GGGGC GGGG
                   ATCCCC TTCC CCCCG CCCC
                     G C
GAM3658 PDK2 3' TAGGGGAAGGGTGGGGGCATTC 82716
                                          ACAT
                      TAGGGGAAGG GGGGCA GGGG
        AGGG
                   ATCCCCTTCC CCCCGT TCCC
                       CAC_ AAG
           3' GGGGAAGGAGTCGGGCAGGGG 82717
GAM3658 RIS1
                                          CATG
                   GGGGAAGGA GGGCAGGGG
                   CCCCTTCCT CCCGTCCCC
                      CAG
GAM3658 SCAM-1 3' GGGGAAGGAGGATGTGGGCGGG 82718
                                           C_ _ A
        GG
                    GGGGAAGGA ATG GGGC GGGG
                   CCCCTTCCT TAC CCCG CCCC
                      CC A C
GAM3658 SCYA22 3' GGGGGGGGGGTGGGGAGAGG 82719
                                        AA ACA C
                   GGGG GG TGGGG AGGGG
                   CCCC CC ACCCC TCTCC
                    CC CC_
                                          _ AC
GAM3658 SEMA4G 5' GGGAGAAGGGTATGGAGTGGGG 82720
                                                 CA
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GGG GAAGG ATGGGG GGGG

G

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CCC CTTCC TACCTC CCCC
```

T CA AC

GAM3658 STX5A 3' GGGGGGAGGACAGGG 82721 AA CATG

GGGG GGA GGGCAGGG

CCCC CCT CCTGTCCC

GAM3658 SUCLG2 5' AGGGCGGGCGCGGGCAGGGG 82722 AA ACATG

GGGG GG GGGCAGGGG

TCCC CC CCCGTCCCC

GC GCG

GAM3658 TADA3L 3' AGGGGAGACAGGGGTAGGGG 82723 AG T C

AGGGGA GACA GGGG AGGGG

TCCCCT CTGT CCCC TCCCC

1

GAM3658 TBC1D1 5' GGGGCGGGTTGGGGCGGGG 82724 AA ACA A

GGGG GG TGGGGC GGGG

CCCC CC ACCCCG CCCC

GC A__ C

GAM3658 TEB4 3' GAGGATGTGGGTGTGGGGTGGG 82725 A_ ACA CA

GG GGGGA GG TGGGG GGGG

CTCCT CC ACCCC CCCC

ACA CAC AC

GGGA GG GGGGCAGGGG

CCCT CC CCTCGTCCCC

C C___

GAM3658 ZFP106 5' AGGGGAGGCAGGGCAGGG 82727 A A TG

AGGGGA GG CA GGGCAGGG

TCCCCT CC GT CCCGTCCC

GAM3658 LOC115207 3' TAGGTGGGGGTGGGGGG 82728 _ AA ACA CA

TAGG GG GG TGGGG GGGG

ATCC CC CC ACCCC CCCC

A C_ ___ AC

G GGGGAGGG GGGCAGGGG

CCCCT CC CCCGTCCCC

C CCGCCG

GAM3658 LOC124930 3' GGGTGAGGTGGGGCAGGGG 82730 GA ACA

GGG AGG TGGGGCAGGGG

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GAM3658 LOC126961 3' TAGGGGCAGGATATGGGG 82731 A C
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                    ATCCCC TCCT TACCCC
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GAM3658 LOC137695 5' TAGGCGGGGGCAGGGGCAGGGG 82732
                                             _ AA A T
                    TAGG GG GG CA GGGGCAGGGG
                    ATCC CC CC GT CCCCGTCCCC
                     G C_ _ _
GAM3658 LOC144110 3' TAGGGGAAGTGGGTGGGG 82733
                                            GACA GCA
                    TAGGGGAAG TGGG GGG
                    ATCCCCTTC ACCC CCC
                        ___ AC_
                                            ACA GGCAG
GAM3658 LOC145082 5' TAGAGGAAGGGTGTGGTCCCTG 82734
        G
                    TAGGGGAAGG TGG GG
                    ATCTCCTTCC ACC CC
                        CAC AGGGA
GAM3658 LOC146229 3' TAGGTGGTGTCAGTGGGGCAGG 82735
                                            _ AAGGA _
                     TAGG GG CA TGGGGCAGGGG
        GG
                    ATCC CC GT ACCCCGTCCCC
                     A ACA C
GAM3658 LOC147138 3' GGGGAGGCAGGGGTAGGGG 82736
                                          AATC
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                    CCCCT CC GT CCCC TCCCC
GAM3658 LOC147228 3' GGGGAAGGGACTGAAGCAGGGG 82616
                                              Α
                    GGGGAAGG AC TGGGGCAGGGG
                    CCCCTTCC TG ACTTCGTCCCC
                       C _
GAM3658 LOC147791 5' GGGGGCAGGGCTTGAGGCAGGG 82737
                                             A_ ACA
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                     GGGG AGG TGGGGCAGGGG
                    CCCC TCC ACTCCGTCCCC
                     CG CGA
GAM3658 LOC150111 5' GGGGGGAGCTCGGGCAGGGG 82738
                                            AA CATG
                    GGGG GGA GGGCAGGGG
                    CCCC CCT CCCGTCCCC
                     __ CGAG
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GAM3658 LOC150197 3' CAGGGGAAGGCAGAAGGG 82739
                    TAGGGGAAGG CA GG AGGG
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GTCCCCTTCC GT CT TCCC
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C _ ___

GAM3658 LOC150197 3' TAGGGGGACGGGCAGGG 82740 AAG AT

TAGGGG GAC GGGGCAGGG

ATCCCC CTG CCCCGTCCC

GAM3658 LOC151176 3' TAGGGGAGGGCAGGG 82741

AGGACAT

TAGGGA GGGCAGGG

ATCCCCT CCCCGTCCC

GAM3658 LOC151904 5' CAGGGGATAGAATGGGGCAGGG 82742 A C

G

TAGGGA GGA ATGGGGCAGGGG

GTCCCCT TCT TACCCCGTCCCC

Α

GAM3658 LOC152220 3' GGGGAAGGGGATGGTGGG 82743 AC GGCA

GGGGAAGG ATGG GGG

CCCCTTCC TACC CCC

CC A___

GAM3658 LOC152915 3' GGGGGAGGGGTGACAGGGG 82744 A ACAT

GGGG AGG GG GGCAGGGG

CCCC TCC CC CTGTCCCC

C A

GAM3658 LOC153232 3' GGGGGGGGGGGGGGGGGGGGGAGGG 82745 AA ACATG

G

GGGG GG GGGCAGGGG

CCCC CC CCCGTCCCC

CC CCCCCG

GAM3658 LOC153525 5' AGGGGGGTGGGGGTGGGG 82707 AA ACA CA

AGGGG GG TGGGG GGGG

TCCCC CC ACCCC CCCC

_ __ CA

GAM3658 LOC158062 3' AGGGGAGGGACAGAG 82746 AGGACAT

AGGGGA GGGGCAGGG

TCCCCT CCCTGTCTC

GAM3658 LOC158067 3' GGGGGGCTGGGGGCAGGG 82747 AA ACAT

GGGG GG GGGCAGGG

CCCC CC CCCGTCCC

__ GAC_

GAM3658 LOC158333 3' GGGTGGAGGAATGAGCAGGGG 82748 GA_ CATG

GGG AGGA GGGCAGGGG

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CCC TCCT CTCGTCCCC
                    ACC TA
GAM3658 LOC170393 3' GGGGCAAGGGTGGGAGGG 78815 ACATG C
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                   CCCC TTCC CCC TCCC
                     G CA_____
                                         _ ACATG C
GAM3658 LOC170393 3' GGGGCAAGGGTGGGAGGG 78815
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                   CCCC TTCC CCC TCCC
                     G CA_____
GAM3658 LOC170393 3' GGGGCAAGGGTGGGAGGG 78815
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                   CCCC TTCC CCC TCCC
                     G CA
GAM3658 LOC170393 3' GGGGCAAGGGTGGGAGGG 78815 ACATG C
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                   CCCC TTCC CCC TCCC
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GAM3658 LOC170393 3' GGGGCAAGGGTGGGAGGG 78815
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                     G CA_____
                                         _ ACATG C
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                   CCCC TTCC CCC TCCC
                     G CA
GAM3658 LOC201501 5' AGGGAAGGGTGGCGGTGGGGG 82749
                                            ACA CA
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                   TCCCTTCC ACC CC CCCC
                      C_ G AC
GAM3658 LOC253842 3' GGGGTAGGGGGAGGCAGGGG 24996
                                           A ACAT
                   GGGG AGG GGGGCAGGGG
                   CCCC TCC CTCCGTCCCC
                     A CC_
GAM3658 LOC254016 3' TAGGGGAAGGTTGGGG
                                 82750
                                          ACA
                   TAGGGGAAGG TGGGG
                   ATCCCCTTCC ACCCC
GAM3658 LOC255121 5' CAGGGGAAGGCGGTGGGG 82751
                                           ACA
                   TAGGGGAAGG TGGGG
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GTCCCCTTCC ACCCC
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GCC GAM3658 LOC255270 3' AGGGAGAGGGGGAGGGG 82635 GA CATG AGGG AGGA GGGCAGGGG TCCC TCCT CCCGTCCCC TC GAM3658 LOC257395 3' TAGGGGCAGGATATGGGG 82731 A C TAGGGG AGGA ATGGGG ATCCCC TCCT TACCCC G A GAM3658 LOC257484 5' GGGGGAACGGGTAGCAAAGG 82752 AA AT __ GGGG GGAC GGG GCAGGGG CCCC CTTG CCC CGTTTCC AT GAM3658 LOC85414 3' TAGGGGAAAGTTGGGGGTAGGG 82753 ACAT C G TAGGGGAAGG GGGG AGGGG ATCCCCTTTC CCCC TCCCC AAC_ A GAM3658 LOC85414 3' GGGGAAAGTTGGGGGTAGGGG 82754 ACAT C GGGGAAGG GGGG AGGGG CCCCTTTC CCCC TCCCC AAC A GAM3658 LOC90379 3' GGGGGCGGGCAGGGCAGGGG 82755 AA A TG GGGG GG CA GGGCAGGGG CCCC CC GT CCCGTCCCC CG C GAM3658 LOC90631 3' GGGGGGCAGGGGCAGGG 82756 AAATGGGG GG CA GGGGCAGGG CCCC CC GT CCCCGTCCC __ _ C GAM3658 LOC90678 3' GGGGAAGGGGCCCAGGGCAGGG 82757 ACA G GGGGAAGG TGGGGCAGGGG CCCCTTCC GTCCCGTCCCC CCGG GAM3658 LOC91097 5' GGGGAAGGTAGCGGGGTGGGGG 82678 ACA CA GGGGAAGG TGGGG GGGG CCCCTTCC GCCCC CCCC ATC AC GAM3658 LOC91517 3' GGGGGCAGGGGTGGGCTGGGG 82758 A_ ACATG A GGGG AGG GGGC GGGG

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CCCC TCC CCCG CCCC
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GAM3658 LOC92578 3' CAGGGGAATGGGGTGGGG 82759 AGGAC CA
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                    GTCCCCT TACCCC CCC
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GAM3659 PHKA1 3' GAGCCTCCAGGTAAT
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                    CTCGGAGGTC
                                 CATT A
GAM3659 DKFZp547l224 5' GAGTTTCCAGTTTTTCTGCTCT 82763 C
                                                 G GTAAA
        GT
                     GAG TTCCAGTT TTC TGT
                    CTC AAGGTCAA AAG ACA
                         A ACGAG
GAM3659 EPB41L4 3' AGCCAGGTTGTTTGTAGATGT 82764
                                           TCCA C A
                    AGCT GTTGTT GTA ATGT
                    TCGG CAACAA CAT TACA
                      TC__ A C
GAM3659 LOC161734 3' GAGTTTCCAGTTTTTCTGCTCT 82763 C G GTAAA
        GT
                     GAG TTCCAGTT TTC TGT
                    CTC AAGGTCAA AAG ACA
                         A ACGAG
GAM3660 FLJ20689 3' TGGAAGTTCTCAAGGCCC 82767 A C GC
                    TG AAG TC CAAGGTCT
                    AC TTC AG GTTCCGGG
                     C A A_
GAM3660 FLJ20689 3' TGGAAGTTCTCAAGGCCC 82767 A C GC
                    TG AAG TC CAAGGTCT
                    AC TTC AG GTTCCGGG
                     CAA
GAM3660 SEC14L2 3' TGAAAGCTCCTGAGGTCT 82768
                                           GCCA
                    TGAAAGCTC AGGTCT
                    ACTTTCGAG TCCAGA
                        GAC
GAM3660 LOC56851 3' TGAAAGCTGGGTTTTCTCGTGT 82769
                                             CGCCAAGG C
                    TGAAAGCT
                               TCTCG GT
                    ACTTTCGA
                               AGAGC CA
                       CCCAAA__ A
GAM3661 LOC150622 3' ATAATATTAGCATTGCTATAAA 82772
                                            CG TCC
        Α
                     ATAATA GGT GCTATAAAA
```

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AA TAA
GAM3662 ASL
            3' CCAGGCTATTTGTTTTATTATT 82775 T
                                             TAA
                     CC GGCTATTT TGTTATT
                     GG CCGATAAA ATAATAA
                     Т
                         CAAA
GAM3662 CUBN
             3' CCTGGCTAATTATTATATT 82776
                                          T TA
                     CCTGGCTA TT ATGTT
                     GGACCGAT AA TATAA
                        T TAA
GAM3662 DYRK2 3' CCTGCCACTGATGTTATTA 82777
                                            TTA
                     CCTG CTATT ATGTTATTA
                     GGAC GGTGA TACAATAAT
                         С
GAM3662 DYRK2 3' CCTGCCACTGATGTTATTA 82777
                                          G TTA
                     CCTG CTATT ATGTTATTA
                     GGAC GGTGA TACAATAAT
                      _ C__
GAM3662 IL22RA2 5' TGGTAATTTTAATGCCATT 82778
                                         CT
                     TGG ATTTTAATGTTATT
                     ACC TAAAATTACGGTAA
                      ΑT
GAM3662 PLA2G10 5' GCTCTTTTGATGTTATTACT 82779
                                          A A
                     GCT TTTT ATGTTATTACT
                     CGA AAAA TACAATAATGA
                      G C
GAM3662 SNCAIP 5' CTGGTTCTTTTGGTCATCACT 82780
                                           CTA AAT
                     CTGG TTTT GTTATTACT
                     GACC AAAA CAGTAGTGA
                      AAG C__
GAM3662 SRC
            3' CCTGGCAGTGGGAATGTTATTG 82781
                                            TATTTT
                                                     Α
         CT
                      CCTGGC
                             AATGTTATT CT
                     GGACCG TTACAATAA GA
                       TCACCC
GAM3662 BC008967 5' CCTGGCTATGATTGTTATT 82782
                                            TTTAA
                     CCTGGCTAT TGTTATT
                     GGACCGATA ACAATAA
                        CTA__
GAM3662 BLOV1 3' CCTGGCTAATTTTGTATTATT 82783
                                            T AA
```

CCTGGCTA TTT TGTTATT

TATTAT TCG CGATATTTT

GGACCGAT AAA ATAATAA

T AC

GAM3662 FBXO26 3' CCTGGCTAATTTTTTAAAAATT 82784 Τ_ ATT CCTGGCTA TTTTAA GTTATT GGACCGAT AAAATT TAATAA TAA TT GAM3662 FLJ11700 3' CCTGGCTAATTTTTGTATT 82785 AA CCTGGCTA TTTT TGTT GGACCGAT AAAA ATAA T AC GAM3662 FLJ20793 3' TGGCATTTAAATGTTATT 82786 T T TGGC ATTT AATGTTATT ACCG TAAA TTACAATAA Т T AA GAM3662 KIAA1871 3' CCTGGCTAATTTTTGTTATT 82787 CCTGGCTA TTT TGTTATT GGACCGAT AAA ACAATAA ΤA GAM3662 POFUT1 3' CCTGGCTATTATTATT 82788 TTAA CCTGGCTATT TGTTATT GGACCGATAA ATAATAA TA GAM3662 SPRY4 3' CCTGGCTATTTTGTAGTT 82789 AAT CCTGGCTATTTT GTT GGACCGATAAAA CAA CAT GAM3662 TCL6 3' TGGCTATTTTCATGGTTATT 82790 Α _ TGGCTATTTT ATG TTATT ACCGATAAAA TAC AATAA G C GAM3662 TCL6 3' TGGCTATTTTCATGGTTATT 82790 Α _ TGGCTATTTT ATG TTATT ACCGATAAAA TAC AATAA G C GAM3662 TRPM3 3' CTGGCTATTTTATTT 82791 **ATG** CTGGCTATTTTA TTATT 11111111111 11111 GACCGATAAAAT AATAA AA_{-} GAM3662 WBSCR23 5' CCTGGCTATTTATTTATT 82792 **TAATG** CCTGGCTATTT TTATT

GGACCGATAAA AATAA TAA GAM3662 LOC148823 3' CCTGGCTAATTTTTTAATTATT 82793 AAT CCTGGCTA TTTT GTTATT GGACCGAT AAAA TAATAA T AAT GAM3662 LOC149113 5' CCTAGCTAACTGTTGTTATT 82794 TTTTAA CCTGGCTA **TGTTATT** GGATCGAT **ACAATAA** TGACA GAM3662 LOC153688 3' CTGGCAAGGGAATGTTATTGCT 82795 **TATTTT** CTGGC AATGTTATT CT GACCG TTACAATAA GA TTCCC C GAM3662 LOC154403 5' CCTAGCTAACTGTTGTTATT 82794 TTTTAA CCTGGCTA TGTTATT GGATCGAT ACAATAA TGACA GAM3662 LOC154992 5' CCTAGCTAATTGTTGTTATT 82796 TTTTAA CCTGGCTA **TGTTATT** GGATCGAT **ACAATAA** TAACA

TAACA_

GAM3662 LOC158438 3' TGGCTATTTATAAATGTT 82797 T__

TGGCTATTT AATGTT

||||||||| |||||
ACCGATAAA TTACAA

TAT

T AC

GAM3662 LOC202052 3' CTGGCTATTTCTAGAAATGCT 82798 _____
CTGGCTATTTT AATGTT

GACCGATAAAG TTACGA

ATCT

GAM3662 LOC221641 5' CCTGGCTATTTTGTTATCA 82800 TAA
CCTGGCTATTT TGTTATTA

GGACCGATAAA ACAATAGT

GAM3662 LOC222104 3' TGGCTATTCCTCATTGTTATT 82801 AA__
TGGCTATTTT TGTTATT
||||||||||

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AGTA
GAM3662 LOC255196 5' CCTGGCTAATTTTAGTATT 82802
                                                Α
                     CCTGGCTA TTTTA TGTT
                     GGACCGAT AAAAT ATAA
                        T C
GAM3662 LOC90786 5' TGGCATATTTTAGCTAATTTAC 82803
                                                AT .
         Т
                     TGGC TATTTTA GTTA TTACT
                     ACCG ATAAAAT CGAT AATGA
                          TA
                       Т
GAM3662 LOC91069 3' TGGCCATTTTGATGTGCACT 82804
                                               A TAT
                     TGGCTATTTT ATGT TACT
                     ACCGGTAAAA TACA GTGA
                         CC
GAM3662 LOC92539 5' TGGATAACTATGTTATTACT 82805
                                          C TTTTA
                     TGG TA ATGTTATTACT
                     ACC AT TACAATAATGA
                      T TGA
GAM3663 CEACAM1 3' AAATTGTGTATTCTTTAAC 82808
                                                C
                     AGATTGTGTATTCTT AAC
                     TTTAACACATAAGAA TTG
GAM3663 MSL3L1 3' TAAAGGTATGCCTTCTTCAAC 82809
                                            AT A
                     TAAAG TGTGT TTCTTCAAC
                     ATTTC ATACG AAGAAGTTG
                       C_{-} G
                                            A TG
GAM3663 SCAP2 3' TATAAAGTTTGAACATTCTT 82810
                     TATAAAG TTG TATTCTT
                     ATATTTC AAC GTAAGAA
                        A TT
GAM3663 SLC4A4 3' AAGAAAAATATTCTTCAA 82811
                                          TTGT
                     AAGA GTATTCTTCAA
                     TTCT TATAAGAAGTT
                       TTT_{-}
GAM3663 CSAD
             3' TATAAAGACTTGTATTC 82812
                                           G
                     TATAAAGATT TGTATTC
                     ATATTTCTGA ACATAAG
GAM3663 DKFZP434P0721 3' TATAAAGATTGTGGTTCCT 82813
                                                   TA
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TATAAAGATTGTG TTCT

ACCGATAAGG ACAATAA

```
ATATTTCTAACAC AGGA
                          CA
GAM3663 FLJ11021 3' TACAAAAATTTGTATTTTCAA 82814
                                            G C
                     TATAAAGATT TGTATT TTCAA
                     ATGTTTTTAA ACATAA AAGTT
GAM3663 KIAA1237 3' AGACTGTGTGACCTCAAC 82815
                                            ATT
                     AGATTGTGT CTTCAAC
                     TCTGACACA GGAGTTG
                        CT
GAM3663 KIAA1829 3' TATGAAGGCTGTGTATTC 82816 A AT
                     TAT AAG TGTGTATTC
                     ATA TTC ACACATAAG
                      C CG
GAM3663 PC326 3' GAAAATTATTCTTCAAC 82817 TT G
                     GA GT TATTCTTCAAC
                     CT TA ATAAGAAGTTG
                      TT _
GAM3663 RPH3A 3' AAGATTGCCTGACTTCAAC 82818
                                            GTATT
                     AAGATTGT CTTCAAC
                     TTCTAACG GAAGTTG
                        GACT
GAM3663 SENP7 3' TATAAAGATAGTGCCAAAATCA 82819 T ATTCT
                      TATAAAGAT GTGT TCAAC
         AC
                     ATATTTCTA CACG AGTTG
                        T GTTTT
GAM3663 UNC5D 3' TATAAAATTTAGTTTCTTCAAC 82820
                                            A T A
                     TATAAAG TTG GT TTCTTCAAC
                     ATATTT AAT CA AAGAAGTTG
GAM3664 FGF23 3' CTAGCAGGGCAGATTTTCG 82823 C A
                                                С
                     CT GCG GCAGATT TCG
                     11 111 1111111 111
                     GA CGT CGTCTAA AGC
                      T CC
                            Α
GAM3664 KIAA1266 5' TTGCCACTTGCAGTCT
                                  82824
                                          CGCGA AT
                     TTGCCACT GCAG TCT
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GAM3664 LOC150378 3' TTGCCACTTGCAGGCAGAGTC 82825

AACGGTGA CGTC AGA

TTGCCACT GCG GCAGA TC

C A T

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AACGGTGA CGT CGTCT AG
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A C C GAM3665 PMCHL1 3' AGGGGTTTTAAAACCT A GTAAAA 82828 AGG GTTT TAAAATCT 111 1111 TCC CAAA **ATTTTGGA** С GAM3665 SCN8A 3' GAAGTTTGTAAACAATCT 82829 **ATAA** GGAGTTTGTAAA AATCT CTTCAAACATTT TTAGA G GAM3665 SYN2 3' GAAGTTTGATCTTGAAAATCTC 82830 TAAAAT Т GGAGTTTG AAAATCTCT CTTCAAAC TTTTAGAGA **TAGAAC** GAM3665 TRPM8 3' AGGGGTCTGAAAATCT 82831 A TAAAAT AGG GTTTG AAAATCT TCC CAGAC TTTTAGA С GAM3665 FJX1 3' AAATTCTGTAAAATAAAAT 82832 G **GGA TTTGTAAAATAAAAT** TTT AGACATTTTATTTTA GAM3665 FLJ13386 5' GGAGGTCTGCTAGTGAAATCTC 82833 AAAATA Т GGAG TTTGT **AAATCTCT** CCTC AGACG **TTTAGAGA** C ATCAC_ GAM3665 GALNT6 3' AGGAGCTTGTGGGGGGCTCTCT 82834 AAAATAAAA AGGAGTTTGT TCTCT 11111 TCCTCGAACA **AGAGA** CCCCCG GAM3665 GIT2 3' AGGGGTTTGCAAGATAAA 82835 AGG GTTTGTAA ATAAA 111 11111111 11111 TCC CAAACGTT TATTT С GAM3665 GIT2 3' AGGGGTTTGCAAGATAAA 82835 Α Α AGG GTTTGTAA ATAAA TCC CAAACGTT TATTT С С GAM3665 GIT2 3' AGGGGTTTGCAAGATAAA 82835 Α AGG GTTTGTAA ATAAA

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TCC CAAACGTT TATTT
                     C
                          C
GAM3665 KIAA1715 3' GGAGTTTGGGAAGGCATCTCT 82836
                                            TA ATAAA
                    GGAGTTTG AA ATCTCT
                    CCTCAAAC TT TAGAGA
                        CC CCG
GAM3665 KIAA1718 3' AGGAATTTGTAAAATGCTC 82837
                                              AAAAT
                    AGGAGTTTGTAAAAT CTC
                    TCCTTAAACATTTTA GAG
                          С
GAM3665 RBAK
             3' AGAAGTTTGTGAATAAAATTTC 82838
                                            AA
                                                 C
        Т
                     AGGAGTTTGT AATAAAAT TCT
                    TCTTCAAACA TTATTTTA AGA
                        С
                             Α
GAM3666 ABCC3 3' TGGATCCGTTTCAGAGACA 82841
                                         C AAAGCCC
                    TGGA CC TCAGAGACA
                          ACCT GG AGTCTCTGT
                      A CAA
GAM3666 ADORA1 3' GGGGTCCAGAGTCCTCAGAG 82842 T AC A C
                    G GG CCA AG CCTCAGAG
                    C CC GGT TC GGAGTCTC
                     CA C A
GAM3666 BMP1
            3' ATGGACCCGTCAGAGA
                                         AAAGCCC
                                 82843
                    GTGGACCC
                               TCAGAGA
                    TACCTGGG
                               AGTCTCT
                        С
GAM3666 CAPON 5' GCGGACCCGCTCCTTCGGAG 82844
                                             AAA _ _ A
                    GTGGACCC GC CCT C GAG
                    CGCCTGGG CG GGA G CTC
                        ___ A A C
GAM3666 CBFB
            3' GTGGACCGAAAGCCCTTAGCTA 82845
                                            С
                                                C __
        GACA
                       GTGGACC AAAGCCCT AG AGACA
                     CACCTGG TTTCGGGA TC TCTGT
                           A GA
GAM3666 CBFB 3' GTGGACCGAAAGCCCTTAGCTA 82845
                                            С
                                                C __
```

C A GA

GAM3666 CIT 3' GGACCCAAAGCAACAGA 82846 CCT

GGACCCAAAGC CAGA

|||||||||||||||

GACA

GTGGACC AAAGCCCT AG AGACA

CACCTGG TTTCGGGA TC TCTGT

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CCTGGGTTTCG GTCT
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TT_ GAM3666 CTLA4 3' GGACCCAAGGTGGAAAGACA 82847 AGCCCTC GGACCCAA AGAGACA CCTGGGTT TTTCTGT CCACC GAM3666 CYP46 3' GTGGGCACAGGGGGCTCAGAGA 82848 ACC AAGCC CA GTGG CA CTCAGAGACA CACC GT GAGTCTCTGT CGT CCCCC GAM3666 DIAPH2 3' TGGGCCTAAAAGGGACAGAGAC 82849 A C CCCT Α TGG CC AAAG CAGAGACA ACC GG TTTT GTCTCTGT C A CCCT AAA _ CA GAM3666 EPHB6 5' GTGGACCCGGGGCTCCTGGAG 82850 GTGGACCC GC CCT GAG CACCTGGG CG GGA CTC CCC A C_ GAM3666 FN14 3' TGGGCCCAGGCCTCAGAG 82851 A AA C TGG CCCA GCC TCAGAG ACC GGGT CGG AGTCTC C C_ _ GAM3666 GAS7 3' GGGTCTTCAGCCTCAGAGACA 82852 ACCCAA C GG AGCC TCAGAGACA CC TCGG AGTCTCTGT CAGAAG GAM3666 GAS7 3' GGGTCTTCAGCCTCAGAGACA 82852 ACCCAA C GG AGCC TCAGAGACA CC TCGG AGTCTCTGT CAGAAG _ GAM3666 GRIA1 3' GACTCTACTCTCAGAGACA 82853 CCAAA C GAC GC CTCAGAGACA CTG TG GAGTCTCTGT AGA__ A GAM3666 PPP2R4 3' GTGGACCCAGACACAGGA 82854 AA CCT A GTGGACCCA GC CAG GA CACCTGGGT TG GTC CT C_ T__ _ GAM3666 RNF26 3' GTGGCCCCAAAGTCAG 82855 CCC GTGG CCCAAAG TCAG

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CACC GGGTTTC AGTC
                      G
GAM3666 USF2 3' GGACCCAGAAACAAGAG
                                          CCTC
                                  82856
                     GGACCCA AAGC AGAG
                     CCTGGGT TTTG TCTC
                        C T
GAM3666 CACH-1 3' GTGGCCCCAAAGCTTGAC
                                   82857
                                          Α
                                              CCTCAGA
                     GTGG CCCAAAGC
                                    GAC
                     Ш
                     CACC GGGTTTCG
                                    CTG
                      G
                           AA
GAM3666 FLJ10482 3' GTGGCCCCAATTTCCTCAGAGA 82858
                                               AGC
         CA
                      GTGG CCCAA CCTCAGAGACA
                     CACC GGGTT GGAGTCTCTGT
                      G AAA
GAM3666 FLJ13291 3' TGGACTCAGAGCCCTCAA 82859
                                           CA
                     TGGAC CA AGCCCTCAG
                     ACCTG GT TCGGGAGTT
                       A C
GAM3666 FLJ20045 5' TGGACTCAGAGCCCCCAG 82860
                                           CA
                     TGGAC CA AGCCCTCAG
                     ACCTG GT TCGGGGGTC
                       A C
GAM3666 KIAA0061 3' TGGATCCAAAGACATTCAGAGG 82861
                                             С
                                                CC
                      TGGA CCAAAG C TCAGAG CA
         CA
                     ACCT GGTTTC G AGTCTC GT
                         T TA
                               С
GAM3666 KIAA0247 3' GGCCTATAGGGCCCTCAGAGA 82862
                                           A CAAA
                     GG CC GCCCTCAGAGA
                     CC GG
                            CGGGAGTCTCT
                      _ ATATCC
GAM3666 KIAA0767 3' GCGGGTGGCCCTCAGAGC 82863
                                           ACCCAAA
                     GTGG
                            GCCCTCAGAG C
                     Ш
                         CGCC
                            CGGGAGTCTC G
                      CAC_
GAM3666 KIAA1199 3' GTGGACCCAATAGCTGTTCAGA 82864
                                               _ CC_
                     GTGGACCCAA AGC TCAGA
                     CACCTGGGTT TCG AGTCT
                         A ACA
GAM3666 KIAA1297 3' GTGGACCCACAGCCTTGAG 82865
                                             A CTCA
                     GTGGACCCA AGCC GAG
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CACCTGGGT TCGG CTC
                        G AA
GAM3666 KIAA1904 3' GGGTTCAAGGCCCTCAGAG 82866 ACC A
                    GG CAA GCCCTCAGAG
                    CC GTT CGGGAGTCTC
                     CAA C
GAM3666 KREMEN2 3' GGCCCAGAGTCAGAGA
                                  82867 A A CCC
                    GG CCCA AG TCAGAGA
                    CC GGGT TC AGTCTCT
                     _ C ___
GAM3666 LIMR
            3' GTGGTCCAAAGCCCCTCCAGGA 82868
                                          AC
                    GTGG CCAAAGCCCT CAG GA
                    CACC GGTTTCGGGG GTC CT
                           AG _
GAM3666 MGC3146 3' GTCGACTCCCTCAGAGAC 82869 G CCAAAG
                    GT GAC CCCTCAGAGAC
                    CA CTG GGGAGTCTCTG
                     G A
GAM3666 PLAGL2 3' GTGGCTCCAAAGCCTTGAC 82870
                                         AC
                                              CTCAGA
                    GTGG CCAAAGCC
                                   GAC
                    CACC GGTTTCGG
                                   CTG
                      GA
                           AA
GAM3666 PP1628 5' TGGACCCAAGGCCTCTGCA 82871
                                           Α _ _
                    TGGACCCAA GCC CT CA
                    ACCTGGGTT CGG GA GT
                        CAC
GAM3666 PPP1R16B 3' GGACTTAAAGCCCCAAGAA 82872
                                          CC
                                               C
                    GGAC AAAGCCCT AGAG
                    CCTG TTTCGGGG TCTT
                      AA
                          Т
GAM3666 SFRS11 3' TGGACTCCCTCAGAGC
                                        CCAAAG
                                 82873
                    TGGAC CCCTCAGAG C
                    ACCTG GGGAGTCTC G
                              С
                      Α
GAM3666 LOC144596 3' GGACCCAGAAACAAGAG 82856
                                           CCTC
                    GGACCCA AAGC AGAG
                    CCTGGGT TTTG TCTC
                       C T_
GAM3666 LOC144698 5' TGGATCCAAAGCCCTGAG 82874
                                               CA
```

TGGA CCAAAGCCCT GAG

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ACCT GGTTTCGGGA CTC
GAM3666 LOC152317 3' GGACCCAAAGCTCTGAC 82875 C CAGA
                    GGACCCAAAGC CT GAC
                    CCTGGGTTTCG GA CTG
                        Α _
GAM3666 LOC154386 5' GTAGGCCGTTCCTCAGAGGCA 82876 A CAAAGC
                    GTGG CC CCTCAGAG CA
                    CATC GG GGAGTCTC GT
                     C CAA
                              С
GAM3666 LOC158235 5' GTGGACCCAGAGCGCCAG 82877
                                           A CT
                    GTGGACCCA AGC C CAG
                    CACCTGGGT TCG G GTC
                       C C_
                                            AAAG _ A__
GAM3666 LOC160391 5' GTGGACCCGGGTCCCTTCCTGG 82878
        AGAC
                      GTGGACCC CCCT C GAGAC
                    CACCTGGG GGGAG CTCTG
                       CCCA A GAC
GAM3666 LOC196759 3' GTGGCGCCCAGAAACTTGGAGA 82879
                                            A_ _ CCTCA
                    GTGG CCCA AAGC GAGA
                    CACC GGGT TTTG CTCT
                     GC C AAC
GAM3666 LOC202152 5' GGATCCACGCTCAGAGAC 82880 C AAGCC
                    GGA CCA CTCAGAGAC
                    CCT GGT GAGTCTCTG
                     A GC
GAM3666 LOC253046 5' TGGGCCCTCTTCCCCTCAGAGG 82881 A AAAG
        CA
                     TGG CCC CCCTCAGAG CA
                    ACC GGG GGGAGTCTC GT
                     C AGAAG
                               C
GAM3666 LOC257407 5' GTGGCTCAGAGAAACCGAGACA 82882
                                            ACC ___ CTCA
                    GTGG CA AAGCC GAGACA
                    CACC GT TTTGG CTCTGT
                     GA_ CTC
GAM3666 LOC90139 3' GTGGGTTCCGAGTCCTCAAAGA 82883
                                           AC_ AA C
        CA
                     GTGG CC AG CCTCAGAGACA
                    CACC GG TC GGAGTTTCTGT
                     CAA C_ A
GAM3666 LOC92997 3' GTGGCTCAGAGAAACCGAGACA 82882
                                            ACC ___ CTCA
                    GTGG CA AAGCC GAGACA
```

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CACC GT TTTGG CTCTGT
                     GA_ CTC
GAM3667 CENPB 3' TGACGTGGATGGCAGAGGG 82886
                                           AC TAAA
                    TGACGTGGAT TAG AGGG
                    ACTGCACCTA GTC TCCC
                        CC
GAM3667 HUNK 3' GATGTGGATACATGTGGAGGG 82887 C
                                             TA AAA
                    GA GTGGATAC GT AGGG
                    CT CACCTATG CA TCCC
                     Α
                         TA CC
GAM3667 NBS1
            3' TGACTGGATACTTGTATGGGGG 82888
                                              A AAA
        Α
                    TGAC TGGATACT GTA GGGA
                    ACTG ACCTATGA CAT CCCT
                         A ACC
GAM3667 TFF3 3' TGACGTGGGTGCCAGTCTGGA 82889
                                           ATA AAAAG
                    TGACGTGG CTAGT GGA
                    ACTGCACC GGTCA CCT
                       CAC GA
GAM3667 ALS2CR3 3' TGGCGGGGATGCCTCAAAAGGG 82890 A T A AG
                    TG CG GGAT CT TAAAAGGG
                    AC GC CCTA GG GTTTTCCC
                     CCCA
GAM3667 FLJ23590 5' TGACGTGGGCACTCAGCAGGG 82891
                                            A _ AAA
                    TGACGTGG TACT AGT AGGG
                    ACTGCACC GTGA TCG TCCC
                       C G
GAM3667 KIAA1297 3' TGACGTGGGTACTGGGTAGGG 82892
                                            A A AAA
                    TGACGTGG TACT GT AGGG
                    ACTGCACC ATGA CA TCCC
                       C CC ___
GAM3667 KIAA1937 5' TGGACACCTTGGTGGAAGGG 82893
                                            A__ AA
                    TGGATACT GT AAGGG
                    ACCTGTGG CA TTCCC
                       AAC CC
GAM3667 PSR
            3' TGACACAAGCTAGTGGGAGGG 82894
                                          TG ATA AAA
                    TGACG G CTAGT AGGG
                    ACTGT T GATCA TCCC
                      GT C__ CCC
GAM3667 Spir-1 3' TGACGTGAAGTGTGGAGGG 82895
                                          TACTA AAA
                    TGACGTGGA GT AGGG
```

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ACTGCACTT CA TCCC
                         CA___ CC_
GAM3668 ALS2 3' TAAAAGTTCCTTTCTCCCCT 82898
                     TAAAA TTCC CTCCCCT
                     ATTTT AAGG GAGGGGA
                       C AAA
GAM3668 ASGR2 3' CTTAAACTACCTCCTTTCTCT 82899 A C CC
                     CT AAATT CCTCC TTTCTCT
                     11 11111 11111 1111111
                     GA TTTGA GGAGG AAAGAGA
                      А Т
GAM3668 ASGR2 3' CTTAAACTACCTCCTTTCTCT 82899 A C
                                                CC
                     CT AAATT CCTCC TTTCTCT
                     GA TTTGA GGAGG AAAGAGA
                      A T
GAM3668 ASGR2 3' CTTAAACTACCTCCTTTCTCT 82899 A C CC
                     CT AAATT CCTCC TTTCTCT
                     GA TTTGA GGAGG AAAGAGA
                      A T __
GAM3668 ASGR2 3' CTTAAACTACCTCCTTTCTCT 82899 A C CC
                     CT AAATT CCTCC TTTCTCT
                     GA TTTGA GGAGG AAAGAGA
                      A T
GAM3668 CALCRL 3' CTAGGAATTCCCTCCCACT 82900
                                          Α
                     CTA AATTCCCTCCC CT
                     GAT TTAAGGGAGGG GA
                      CC
                             Т
GAM3668 CDH12 5' CCCAGGATTCCCTCCTGTCATC 82901
                                            AA
                                                  CCTT
         Т
                     CCTA ATTCCCTCC TC TCT
                     GGGT TAAGGGAGG AG AGA
                       CC
                            AC__ T
GAM3668 CNTNAP2 3' CCTAGTAATTCCCTCCTCCT 82902
                     CCTA AATTCCCTCC CCTT
                     GGAT TTAAGGGAGG GGGA
                       CA
GAM3668 DDX6
             3' AAATTCCCTCTCCCACCCCT 82903
                                             _ TT
                     AAATTCCCTC CCC TCTCT
                     TTTAAGGGAG GGG GGGGA
                         A T_{-}
GAM3668 ELK3
            5' TTCCCCCTTTTTTTCTTTCTCT 82904
                                           CC___
                     TTCCCTC CTTTCTCT
```

```
AAAAAA
GAM3668 ENPP3 3' CTAAAACTCTCCTTTCTCT 82905
                                       CCTCC
                    CTAAAATTC CCTTTCTCT
                    GATTTTGAG GGAAAGAGA
                       Α
GAM3668 ETS1 5' CTCAAATTCCCGCTGCCTTTCT 82906 A
                                           TCC
                    CT AAATTCCC CCTTTCT
                    GA TTTAAGGG GGAAAGA
                    G
                        CGAC
GAM3668 FHIT 5' CCTAGGATACCTTCTTTCTCTT 82907 AA T C CC
        TCTCT
                      CCTA AT CC TC CTTTCTCT
                    GGAT TA GG AG GAAAGAGA
                     CC T A AAAGA
GAM3668 FOXO1A 3' AAATTCCCTCCTTCCACT 82908
                                          CC T
                    AAATTCCCTCC TTTC CT
                    TTTAAGGGAGG AAGG GA
                        __ T
GAM3668 GALNT7 3' CCAAAATTCTCTTTCCTTC 82909
                                          C CC
                    CTAAAATTC CT CCTTT
                    GGTTTTAAG GA GGAAG
                       A AAA
GAM3668 HPCA 3' CCTAGAATCCTTCTCCCCT 82910
                                       A C
                    CCTA AATTC CTCCCCT
                    GGAT TTAGG GAGGGGA
                     C AAGA
GAM3668 IFNGR2 5' CCCGCCCCCCCCTTT 82911
                                       AAAA
                    CCT TTCCCTCCCCTTT
                    GGG GGGGGGGAAA
                     CG
GAM3668 KCNJ5 5' CCTTGGGTCACTCCCTTTCTCT 82912 AAAAT C C
                    CCT TC CTCCC TTTCTCT
                    GGA AG GAGGG AAAGAGA
                     ACCC_ T
GAM3668 KCNK6 3' CCTTCCATCTTTCCCTTTCT 82913 AAAAT C ____
                    CCT TCC TC CCCTTTCT
                    GGA AGG AG GGGAAAGA
                       __ T AAA
                                       C C___
GAM3668 MEF2C 5' TTCCTTCCTTTCTTTCT 82914
                    TTCC TCC CTTTCTCT
```

AAGGGGG GAAAGAGA

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AAGG AGG GAAAGAGA
                      A AAAA
GAM3668 NFIX 3' CAAAATTTCTTCTCCCCCCT 82915
                                         _ C
                    TAAAATT C CTCCCCTTT
                    GTTTTAA G GAGGGGGA
                       A AA
GAM3668 NR5A2 3' CCTCATCCTTTCCTTT 82916
                                        AAAATTC CC
                    CCT CCTTTCTCT
                    Ш
                        GGA
                          GGA GGAAAGAGA
                     GTA AA
GAM3668 PLXNA2 3' TTCTTCTCCTCTTTCTCT 82917
                                       C C
                    TTC CTCC CTTTCTCT
                    AAG GAGG GAAAGAGA
                     AA A
GAM3668 PTP4A2 3' AATTCCTTTTCTCTT 82918
                                         C__ CC
                    AATTCC TC CTTTCTCT
                    TTAAGG AG GAAAGAGA
                      AAA A
                                         C__ CC
GAM3668 PTP4A2 3' AATTCCTTTTCTCTT 82918
                    AATTCC TC CTTTCTCT
                    TTAAGG AG GAAAGAGA
                      AAA A
GAM3668 RPS6KA5 3' AAAACAGACCCCTTTCTCT 82919
                                          TCCCT
                    AAAAT CCCCTTTCTCT
                    TTTTG GGGGAAAGAGA
                      TCT
GAM3668 SCA1 5' CTGAAATCCACTCTTTCTCT 82920 A C CCC
                    CT AAATTC CTC TTTCTCT
                    GA TTTAGG GAG AAAGAGA
                     C T __
            3' CCTTAAATCCTTCCCTTT 82921
GAM3668 SCD
                                      A TC C
                    CCT AAAT CCT CCCTTT
                    GGA TTTA GGA GGGAAA
                     Α __ Α
GAM3668 SLC7A6 3' CCTAGCATTCCCTCTTCCCC 82922
                                         AΑ
                    CCTA ATTCCCTC CCCT
                    GGAT TAAGGGAG GGGG
                      CG
                           AA
GAM3668 SNCA
            3' CTAAAATTCCTCCTTCT
                                82923
                                         C CCT
                    CTAAAATTCC TCC TTCT
```

GATTTTAAGG AGG AAGA

C CCT GAM3668 SNCA 3' CTAAAATTCCTCCTTCT 82923 CTAAAATTCC TCC TTCT GATTTTAAGG AGG AAGA GAM3668 TARDBP 3' TAAAATTCCTTTAGCTCTTCCT 82924 ____ C_ C III **TTTTCTA** TTCC CTC CCTTT TCT A AAGG GAG GGAAA AGA T AAATC AA A III GAM3668 VASP 3' AAATTCCCTCCTTCC 82925 CCT AAATTCCCTCC TTCT TTTAAGGGAGG AAGG GAM3668 AKAP7 3' CCCAAAGTTCCCTTTCCCT 82926 С CCTAAA TTCCCT CCCT GGGTTT AAGGGA GGGA С AA GAM3668 AKAP7 3' CCCAAAGTTCCCTTTCCCT 82926 С CCTAAA TTCCCT CCCT GGGTTT AAGGGA GGGA С AA GAM3668 AKAP7 3' CCCAAAGTTCCCTTTCCCT 82926 Α С CCTAAA TTCCCT CCCT GGGTTT AAGGGA GGGA С AA GAM3668 ATP10D 3' CCTAGAATCCCTCTTTCCCCTT 82927 Α Т CCTA AATTCC C TCCCCTTT GGAT TTAGGG G AGGGGAAA C A AA GAM3668 C17orf26 3' AATTTCCTTCCCTTTTTCTA 82928 C C C III AATT CCT CCCTTT TCT A TTAA GGA GGGAAA AGA T A A III GAM3668 C20orf82 3' CCAAAATTCCCTTTCTC 82929 CCCCT CTAAAATTCCCT TTCTC GGTTTTAAGGGA AAGAG GAM3668 C21orf7 3' TAAAATATCCCTTCTC 82930 CCCCTT

TAAAAT TCCCT

TCTC

```
Т
GAM3668 dA141H5.1 3' CCTACTAAGCAATTCCCTTCTC 82931 A
                                                    CCC
        TTTCT
                       CCTA AATTCCCT CTTTCT
                     GGAT TTAAGGGA GAAAGA
                      GATTCG
                               AGA
GAM3668 DD5
            3' AAATTCCCTATTCCCTCT 82932
                     AAATTCCCT CCCTTT
                     TTTAAGGGA GGGAGA
                        TAA
GAM3668 DKFZP434N161 3' CCTAAGATTCCCACCCCCT 82933
                                                  Т
                     CCTAA ATTCCC CCCCTT
                     GGATT TAAGGG GGGGGA
                          Т
GAM3668 DKFZP761F241 3' CTAAAATGTTCTCTCCCC 82934
                                               С
                     CTAAAAT TC CTCCCC
                     GATTTTA AG GAGGGG
                       CA A
                                           AAAA __ TT
GAM3668 ESPL1 5' CCTGAGGTCCTTCCTCCCGAC 82935
                      CCT TTC CCTCCCC TCT
        CT
                     GGA AGG GGAGGGG GGA
                      CTCC AA
                                CT
GAM3668 FADS2 3' CCTGAGACTCCCTCCCGCTCT 82936
                                           AAA
                                                  CTTT
                     CCT ATTCCCTCCC CTCT
                     GGA TGAGGGAGGG GAGA
                      CTC
                             С
GAM3668 FLJ10057 3' CTGAATTCCCTTGGCCTTCT 82937
                                               CCC
                     CT AATTCCCT CTTTCT
                     GA TTAAGGGA GGAAGA
                     \mathsf{C}_{-}
                         ACC
GAM3668 FLJ10300 5' CTGGAATTCCCTTTTCC 82938 AA
                                             CCCC
                     CT AATTCCCT TTTCT
                     GA TTAAGGGA AAAGG
                      CC
GAM3668 FLJ10803 3' CTACAGTTCCTTCCTCT 82939
                                          AAA C _
                     CTA TTCC TCC CCTTT
                     GAT AAGG AGG GGAGA
                      GTC A A
GAM3668 FLJ11164 3' CCCGAATTCTCTCCCCTTTCTC 82940 AA C
                                                     Ш
        TA
                      CT AATTC CTCCCCTTTCTCT A
```

ATTTTA AGGGA AGAG

```
GG TTAAG GAGGGGAAAGAGA T
                     C_ A
                               Ш
GAM3668 FLJ13188 3' CTAAAACTTTGCTTTCTC 82941
                                         CCCTCCC
                    CTAAAATT CTTTCTC
                    GATTTTGA
                               GAAAGAG
                        AAC
GAM3668 FLJ13910 3' CCTGGAATTCTCTACCTTCTCT 82942 AA CC CC
                    CCT AATTC TC CTTTCTCT
                    GGA TTAAG AG GGAAGAGA
                      CC AT
GAM3668 FLJ14442 3' CTAAAGTTCCTTCCTC 82943
                                         A C _{-}
                    CTAAA TTCC TCC CCT
                    GATTT AAGG AGG GGA
                      CAA
GAM3668 FLJ22390 3' CCCACCCACTCTTCCTCTTTCT 82944 AA CC C
        CT
                     CCTA ATTC TCC CTTTCTCT
                    GGGT TGAG AGG GAAAGAGA
                      GGG A_ A
GAM3668 FLJ22800 3' CCTCCTTCCCTTCTCCTTTCTC 82945 AAAA C
                     CCT TTCCCT C CCTTTCTCT
        Т
                     GGA AAGGGA G GGAAAGAGA
                      GG AA
GAM3668 FLJ22938 3' CTGCAATTTCCTCTCCCCCTT 82946 A_ A _
                    CT AA TTCC CTCCCCTTT
                    GA TT AAGG GAGGGGAA
                     CG A A
GAM3668 FLJ23516 3' CCTGGAATTCTCCCCCCCTTCT 82947
                                           AA C
                    CCT AATTC CTCCCCTTTCT
                    GGA TTAAG GGGGGGGAAGA
                     CC A
GAM3668 FLJ32884 5' CCTATAATTCCTTCTCCCC 82948
                    CCTA AATTCC CTCCCC
                     GGAT TTAAGG GAGGGG
                         AΑ
GAM3668 KIAA0438 3' CCTAAAACCTCAATTTTCT 82949
                                          TTC CCC
                    CCTAAAA CCTC TTTCT
                    GGATTTT GGAG AAAGA
                          TTA
GAM3668 KIAA0644 3' CTATAATTTCTTCCCCTCT 82950
                                         A CCC
                    CTA AATT TCCCCTTT
```

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A AGA
GAM3668 KIAA0847 3' CCTAAAATTCCATTCTATCT 82951 CTCCC T
                    CCTAAAATTCC CT TCT
                    GGATTTTAAGG GA AGA
                        TAA T
GAM3668 KIAA0972 5' CCTGGGGCTCCCTCCTTCC 82952
                                          AAAA
                                                CCT
                    CCT TTCCCTCC TTCT
                    GGA GAGGGAGG AAGG
                     CCCC
GAM3668 KIAA1016 3' CCTGGAATTCTCCTCCCCTCT 82953
                                          AA
                    CCT AATTC CCTCCCCTTT
                    GGA TTAAG GGAGGGGAGA
                     CC A
GAM3668 KIAA1228 3' TAAAATTCCCTTTTCT 82954
                                          CCCC
                    TAAAATTCCCT TTTCT
                    ATTTTAAGGGA AAAGA
GAM3668 KIAA1462 3' CCTTGGGGATCCTTCTCTTTCT 82955 AAAAT C CC
        CT
                     CCT TCC TC CTTTCTCT
                    GGA AGG AG GAAAGAGA
                     ACCCCT A A_
GAM3668 KIAA1918 3' CTAAAATTCTCCCTTT 82956
                                         CCTC
                    CTAAAATTC CCCTTT
                    GATTTTAAG GGGAAA
GAM3668 LPAAT-delta 3' CCTAAAATACCCTTTCT 82957
                                           TCCCTC
                    CCTAAAAT CCCTTTCT
                    GGATTTTA GGGAAAGA
                       Т
GAM3668 MGC11082 5' CCTTAAGCCCTTTTCCTTTCTC 82958
                                           A ATT CC
                     CCT AA CCCT CCTTTCTCT
                    GGA TT GGGA GGAAAGAGA
                     A C__ AAA
GAM3668 NINJ2 3' CCTGGAATGCCCTTCCTATTCT 82959
                                         AA T C CT
                    CCT AAT CCCT CC TTCT
                    GGA TTA GGGA GG AAGA
                     CC C A AT
GAM3668 P2RXL1 3' TAGAATTCCCTGCCCCGCCCT 82960 A
                                                TTT
```

TA AATTCCCT CCCC CTCT

GAT TTAA AGGGGAGA

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AT TTAAGGGA GGGG GGGA
                     С
                         C C_
GAM3668 PEPP3 3' CTGAGGATCTCTCTCTCTCT 82961 AAAAT C CC
                    CT TC CTC CTTTCTCT
                    GA AG GAG GAGAGAGA
                     CTCCT A A
GAM3668 PNMA5 3' AATTCTCCTCCTCTTTCTCT 82962
                                         _ C
                    AATTC CCTCC CTTTCTCT
                    TTAAG GGAGG GAAAGAGA
                      A A
GAM3668 Rab11-FIP3 3' CCTGGGACTTCCCTTTCTCCCT 82963
                                           AAAA
                                                  CCC TT
        CT
                     CCT TTCCCT CT CTCT
                    GGA AAGGGA GA GAGA
                     CCCTG
                           AA GG
GAM3668 RoXaN 3' CCTGAACACCCTCCCCTTTTTC 82964 A ATT
                                                  С
        Т
                    CCT AA CCCTCCCCTTT TCT
                    GGA TT GGGAGGGGAAA AGA
                     C GT_
                             Α
GAM3668 SEC22C 3' CCAAAATATTTCCTTTCTC 82965
                                         TCCCTCC
                    CTAAAAT
                             CCTTTCTC
                    GGTTTTA GGAAAGAG
                       TAAA
                                         AAATTC CC
GAM3668 SPA17 5' CCTATGGAACCTCCTTTCTCT 82966
                    CCTA CCTCC TTTCTCT
                    GGAT GGAGG AAAGAGA
                     ACCTT_
GAM3668 SPTLC2 3' CCTAACAATTTTTTTCCCCCT 82967
                                          CCC
        C
                     CCTAA AATT TCCCCTTT
                    GGATT TTAA AGGGGGAG
                      G AAAAA
GAM3668 SYT12 5' CCCAAAATTCTTTCTCCACTTT 82968
                                           C C
                    CCTAAAATTC CTCC CTTT
                    GGGTTTTAAG GAGG GAAA
                        AAA T
GAM3668 THTPA 3' CCCAGAGTTCCCTTC 82969
                                          AAA
                    CCTA TTCCCT CCCCTTT
                    GGGT AAGGGA GGGGAAG
                     CTC A
GAM3668 URB
            5' CCACTTTTTCCTCCTCTTTTTC 82970
                                        AAATTC C C
                    CTA CCTCC CTTT TCT
        Т
```

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GGT GGAGG GAAA AGA
                      GAAAAA A A
GAM3668 ZAK 3' CCTTAAGACCACCTCTTTCTCT 82971
                                        AAAATTC T C
                     CCT CC CC CTTTCTCT
                         Ш
                          GG GG GAAAGAGA
                     GGA
                      ATTCT T A
GAM3668 ZFP95 3' CCTAAGGTCCCTCTCCCT 82972
                                         AAT
                     CCTAA TCCCTC CCCT
                     GGATT AGGGAG GGGA
                       CC
GAM3668 ZFP95 3' CCTAAGGTCCCTCTCCCT 82972
                                         AAT
                     CCTAA TCCCTC CCCT
                     GGATT AGGGAG GGGA
                       CC
                           Α
GAM3668 LOC116068 3' AAATCACTTTCCCCTTTCTCT 82973
                                            CCC
                     AAATT TCCCCTTTCTCT
                     TTTAG AGGGGAAAGAGA
                       TGAA
GAM3668 LOC123036 3' CCTAAAATATCACCATCTTTCT 82974
                                              _ TCCC
                      CCTAAAAT TC CC CTTTCTCT
                     GGATTTTA AG GG GAAAGAGA
                        T T TA
GAM3668 LOC123316 5' CCTGGACTTTCCTGGCCTTTCT 82975
                                            AAAA C CC
        CT
                      CCT TT CCT CCTTTCTCT
                     GGA AA GGA GGAAAGAGA
                      CCTG A CC
GAM3668 LOC124460 3' CCTAAAATTCTCCCCTCTCT 82976
                                              CC
                     CCTAAAATTC TCCCCTTTCT
                     GGATTTTAAG AGGGGAGAGA
GAM3668 LOC126133 3' CCTCGGGGGTCCCCTTTCTCT 82977
                                            AAAATTCCC
                     CCT
                           TCCCCTTTCTCT
                     Ш
                         AGGGGAAAGAGA
                     GGA
                      GCCCCC_
                                           AA C _
GAM3668 LOC127703 5' CTAGCATTCTCTTCCCCCTC 82978
                     CTA ATTC CT CCCCTTT
                     GAT TAAG GA GGGGGAG
                      CG A A
GAM3668 LOC129676 3' CCTTCCCTTTTCCTCT 82979
                                            AAAAT ___ C
                     CCT TCCC TCC CTTTCTCT
```

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GGA AGGG AGG GAAAGAGA
                          AAA A
GAM3668 LOC142955 5' TAAAATTCCCCTCTTGTTTCT 82980
                                              CCC
                     TAAAATTCCC TC TTTCT
                     ATTTTAAGGG AG AAAGA
                         G AAC
GAM3668 LOC142955 5' CCTAAACCCCCCTTTCTC 82981
                                           ATTCC
                     CCTAAA CTCCCCTTTCTC
                     GGATTT GGGGGGAAAGAG
GAM3668 LOC143279 5' CCCCCTCCTTTTCCTTTTCT 82982
                     TTCCCTCC CCTTT TCT
                     GGGGGAGG GGAAA AGA
                        AAAA A
GAM3668 LOC143308 5' CCTCCCTCCCTCCCTTTTTTCT 82983
                                            AAAA
                                                   CC
                     CCT TTCCCTCCC TTT TCT
                     GGA GAGGGAGGG AAA AGA
                      GG__
                            АА
GAM3668 LOC143915 3' CCTAAGGCTCCCTCCTACCT 82984
                                             AA
                     CCTAA TTCCCTCC CCT
                     GGATT GAGGGAGG GGA
                       CC
                            ΑT
GAM3668 LOC145694 5' CCTGGGACTCCCTCCCCATCT 82985
                                             AAA
                                                    TT
                     CCT ATTCCCTCCCC TCT
                     GGA TGAGGGAGGG AGA
                      CCC
                             T_
                                            TCCC CC
GAM3668 LOC145945 5' CCTAAAATGTCTACTTTCT 82986
                     CCTAAAAT TC CTTTCT
                     GGATTTTA AG GAAAGA
                        C___ AT
GAM3668 LOC146520 5' TAAATATTCCCTCTCTC 82987
                                              CC
                     TAAA ATTCCCTC CTTT
                     ATTT TAAGGGAG GAAG
                          Α
GAM3668 LOC147057 3' CCTGGAATGCCTTTCCCCCT 82988 AA T C_
                     CCT AAT CC TCCCCTT
                     GGA TTA GG AGGGGGA
                      CC C AA
                                            AA ___
GAM3668 LOC147515 3' CCTAAGGTTCCACTTTCCCC 82990
                     CCTAA TTCC C TCCCC
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GGATT AAGG G AGGGG
                      CC TAA
GAM3668 LOC147515 3' CTAAAATTCCCTTTTCCCCC 82989
                    CTAAAATTCCC TCCCCT
                    GATTTTAAGGG AGGGGG
                        AAA
GAM3668 LOC149995 3' CTAAAATTCCCTTTTCCCCC 82989
                    CTAAAATTCCC TCCCCT
                    GATTTTAAGGG AGGGGG
                        AAA
GAM3668 LOC150213 3' CCTGTTCCCCCCCTTT
                                  82991
                                        AAAA T
                    CCT TTCCC CCCCTTT
                    GGA AAGGG GGGGAAA
                     С
GAM3668 LOC150372 3' CCTGGGGCTTCCCTTCCCCACC 82992 AAAA TTT
        CT
                     CCT TTCCCT CCCC CTCT
                    GGA AAGGGA GGGG GGGA
                     CCCCG A T_
GAM3668 LOC150481 3' CCTGAAAATCCCTCATTCT 82993 A T
                                               CCCT
                    CCT AAA TCCCTC TTCT
                    GGA TTT AGGGAG AAGA
                     СТ
                          Т
GAM3668 LOC158431 3' AAATCCTTTCTCTT 82994
                                          CC CC
                    AAATTC TC CTTTCTCT
                    TTTAGG AG GAAAGAGA
                       AAA
GAM3668 LOC161734 3' CTAAACTTCCCTTCTC
                                        A CCCCTT
                                82995
                    CTAAA TTCCCT TCTC
                    GATTT AAGGGA
                                 AGAG
                      G
GAM3668 LOC170372 5' CCATGATTCTTTTCCCTTTCT 82996 AA CCTC
                    CTA ATTC CCCTTTCT
                    GGT TAAG GGGAAAGA
                     AC AAAA
GAM3668 LOC219513 5' CCTAAATTTCCTTTCCCGCCCC 82997
                                             A C_ CTT
                      CCTAAA TTCC TCCC T CTCT
        TCT
                    GGATTT AAGG AGGG G GAGA
                      A AA CGG
GAM3668 LOC222933 5' CTGCAAACCCTTCCTTTCT 82998 AA TT CC
                    CT AA CCCT CCTTTCT
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11 11 1111 1111111

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CG T_ A_
                                           C CCT
GAM3668 LOC254428 3' CTAAAATTCCTTCCAATTCT 82999
                     CTAAAATTCC TCC TTCT
                     GATTTTAAGG AGG AAGA
                         A TT
GAM3668 LOC255520 3' TAAAATTTTCCCCTTC
                                  83000
                                          CCC
                     TAAAATT TCCCCTTT
                     ATTTTAA AGGGGAAG
                       Α
GAM3668 LOC256337 3' TCCTCCTCTTCTTTCTCT 83001
                                          CC
                     TTC CCTC CTTTCTCT
                     AGG GGAG GAAAGAGA
                      A AA
GAM3668 LOC257364 3' CCTGAAAGTCCTTCTCCCC 83002 A T
                     CCT AAA TCC CTCCCCT
                     GGA TTT AGG GAGGGGG
                      C C AA
GAM3668 LOC63904 3' CCAACCCCTCCCTTTTTTCT 83003 TAA
                                                  C
                     CC AATTCCCTCCC TTT TCT
                     GG TTGGGGGAGGG AAA AGA
GAM3668 LOC91344 5' TTCCTTCTTTCCCTTTTTCT 83004
                                          С
                     TTCC TC CCCTTT TCT
                     AAGG AG GGGAAA AGA
                      A AAA
                            Α
GAM3668 LOC91516 5' CCTGGAGTCCTTCCCTGGAGCC 83005 AAAAT C CTT
         TCT
                      CCT TCC TCCC TCTCT
                     111 111 1111 11111
                     GGA AGG AGGG GGAGA
                      CCTC_ A ACCTC
GAM3669 ARHGEF5 3' CATACGGCTATCACTGAAA 83008
                                                ATTT
                     TATAC GCTATCACT GAAA
                     GTATG CGATAGTGA CTTT
GAM3669 GDF8
             3' TATACAGCCATCATGAA
                                 83009
                                            CTATT
                     TATACAGCTATCA TGAA
                     ATATGTCGGTAGT ACTT
GAM3669 MTM1
             3' TATACAGCTATTTCTCCTTAA 83010
                                             CA A
                     TATACAGCTAT CT TTTGA
```

GA TT GGGA GGAAAGA

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AA G
GAM3669 MXI1 3' ACAGTTATCAAAATCTGAAA 83011
                                        C CT
                    ACAG TATCA ATTTGAAA
                    TGTC ATAGT TAGACTTT
                      A TT
GAM3669 MXI1
            3' ACAGTTATCAAAATCTGAAA 83011
                                        C CT
                    ACAG TATCA ATTTGAAA
                    TGTC ATAGT TAGACTTT
                      A TT
GAM3669 SLC20A1 3' TACACAGCTAATTTTGA 83012
                                           TCACTA
                    TATACAGCTA
                                TTTGA
                    ATGTGTCGAT
                                AAACT
                        TA
GAM3669 TRPS1 3' CAGGCACCATTATTTGAAA 83013
                                         CC
                    CAG TATCA TATTTGAAA
                    GTC GTGGT ATAAACTTT
                     C A
GAM3669 USH2A 3' TACAGCTATATTGAAA
                                         CACTAT
                                83014
                    TACAGCTAT
                               TTGAAA
                    ATGTCGATA
                               AACTTT
                        Т
GAM3669 C21orf42 5' CATACAGCTACAAGTTTGA 83015
                                           T CTA
                    TATACAGCTA CA TTTGA
                    GTATGTCGAT GT AAACT
                        _ TC_
GAM3669 CHSY1 3' CAAGTCTATCACTGTTTGAAA 83016 C
                    A AG CTATCACT TTTGAAA
                    G TC GATAGTGA AAACTTT
                     ΤА
                          C
GAM3669 GALNAC4ST-2 3' CATACACTCATGCTATTTGA 83017
                                              G ATCA
                    TATACA CT CTATTTGA
                    GTATGT GA GATAAACT
                       _ GTAC
GAM3669 KIAA0547 3' TACAGCCCTATTTGAAA 83018
                                         ATCA
                    TACAGCT CTATTTGAAA
                    ATGTCGG GATAAACTTT
```

GAM3669 KIAA0972 3' TATACAGCTGACATACTGTG 83019

TATACAGCT CA TATT TG

AT C _

ATATGTCGATA GA GAATT

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ATATGTCGA GT ATGA AC
                        CT _ C
GAM3669 KIAA1320 5' TATACAACCATATTTGGAA 83020
                                            TCAC
                                                  Α
                     TATACAGCTA TATTTG AA
                     ATATGTTGGT ATAAAC TT
                              C
GAM3669 KIAA1718 3' ACAGTCACTTATTTGAAAC 83021
                                          CTA _
                     ACAG TCACT ATTTGAAAC
                     TGTC AGTGA TAAACTTTG
GAM3669 STX12 3' AACATCACTATTTGAAAC 83022
                     AGC ATCACTATTTGAAAC
                     TTG TAGTGATAAACTTTG
GAM3669 LOC151521 3' TACATGGAACCCCTATTTGAAA 83023
                                             GCT A
        C
                     TACA ATC CTATTTGAAAC
                     ATGT TGG GATAAACTTTG
                      ACCT G
GAM3669 LOC221547 3' AGCAGTCTATATTTGAAAC 83024
                                           TA AC
                     AGC TC TATTTGAAAC
                     TCG AG ATAAACTTTG
                      TC AT
GAM3669 LOC257577 3' AGCAGTCTATATTTGAAAC 83024
                                           TA AC
                     AGC TC TATTTGAAAC
                     TCG AG ATAAACTTTG
                      TC AT
                                             СТ
GAM3669 LOC91948 3' TACAGCTATCATAGCTGA 83025
                     TACAGCTATCA TA TTGA
                     ATGTCGATAGT AT GACT
                         _ C
GAM3670 ADAM22 3' CGATGTATCACATGTAAA 83028
                                           GGTAT
                     TGATGTA TATGTAAA
                     GCTACAT GTACATTT
                        AGT__
GAM3670 ADAM22 3' CGATGTATCACATGTAAA 83028
                                           GGTAT
                     TGATGTA TATGTAAA
                     GCTACAT GTACATTT
                        AGT__
GAM3670 CNTN3 3' TGAAGTATGTAATATGTAAA 83029
                                          TGT
                     TGA GTA GTA TATGTAAA
```

111 111 111 11111111

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ACT CAT CAT ATACATTT
                      T A T
GAM3670 GBP1 3' TGTGTATTTGGCATTATGT 83030 A
                     TG TGTA GGTATTATGT
                     AC ACAT CCGTAATACA
                      _{-} AAA
GAM3670 HTR2C 3' TAATGTAGGCATGATTGTAAA 83031
                                              TΑ
                     TGATGTAGGTAT TGTAAA
                     ATTACATCCGTA ACATTT
                          CTA
GAM3670 PMP22 3' ATGTACATATATGTAAA 83032
                                         G T
                     ATGTA GTAT ATGTAAA
                     TACAT TATA TACATTT
                       G
GAM3670 ZNF18 3' TAATGTAGAACATGTAA 83033
                                          TAT
                     TGATGTAGG TATGTAA
                     ATTACATCT GTACATT
                        T___
GAM3670 ATIP1 3' ATGTAGTGTACATGTAAA 83034
                                           Т
                     ATGTAG GTAT ATGTAAA
                     TACATC CATG TACATTT
GAM3670 C21orf93 3' GATGTAGAAGTATGTAAA 83035
                                           TAT
                     GATGTAGG TATGTAAA
                     CTACATCT ATACATTT
                        TC
GAM3670 CDC14A 3' ATGTAGGCACATGTGTAAA 83036
                                             TΑ
                     ATGTAGGTAT TGTAAA
                     TACATCCGTG ACATTT
                         TAC
GAM3670 CHL1
            3' TGTGTAGGAATTTCTATGTAAA 83037 A TA__
                     TG TGTAGG TTATGTAAA
                     AC ACATCC GATACATTT
                         TTAAA
GAM3670 DKFZp434O0515 5' TGATGTAGATTCCTTTGTAAA 83038
                                                  A_A
                     TGATGTAGGT TT TGTAAA
                     ACTACATCTA GA ACATTT
                         AG A
                                            T _
GAM3670 DNM1L 3' TAATGTAGGAATTAATGTA 83039
                     TGATGTAGG ATTA TGTA
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111111111 1111 1111

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T T
GAM3670 FLJ10493 3' TGATGTAGGTATTAATAAA 83040
                                                Т
                      TGATGTAGGTATTA GTAAA
                      ACTACATCCATAAT TATTT
GAM3670 FLJ13340 3' TGTTGTAGGTTTCTCTGTAAA 83041
                                           Α
                                                A A_
                      TG TGTAGGT TT TGTAAA
                      AC ACATCCA AG ACATTT
                          A AG
GAM3670 FLJ20126 3' TGCTGTAGGTATACCTA 83042
                                               T G
                      TG TGTAGGTAT AT TA
                      11 111111111 11 11
                      AC ACATCCATA TG AT
                       G
                           G
GAM3670 FLJ20445 3' GATGTCAACATTATGTAAA 83043
                                            AG
                      GATGT GTATTATGTAAA
                      CTACA TGTAATACATTT
                        GT
                                    83044
GAM3670 HSPC055 3' TGATTAGGTATCATACA
                                           G
                      TGAT TAGGTATTATGTA
                      ACTA ATCCATAGTATGT
GAM3670 KIAA1915 5' ATGTAAATCCATGTAAA 83045
                                             Α
                      ATGTAGGT TTATGTAAA
                      TACATTTA GGTACATTT
GAM3670 KLHL4 3' TGATATAGGAAATGTAAA 83046
                                             TATT
                      TGATGTAGG ATGTAAA
                      ACTATATCC TACATTT
                         TT__
GAM3670 PRO0097 5' TGATAAATATTATGTAA
                                           TΑ
                                    83047
                      TGATG GGTATTATGTAA
                      ACTAT TTATAATACATT
GAM3670 PSIP2
             3' TAATGTAGCACAATGTA 83048
                                           G T
                      TGATGTAG TAT ATGTA
                      ATTACATC GTG TACAT
                         _ T
```

GAM3670 TBDN100 3' TGTTGTAGGTTTCTCTGTAAA 83041

TG TGTAGGT TT TGTAAA

 $A A_{\perp}$

ATTACATCC TAAT ACAT

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AC ACATCCA AG ACATTT
                          A AG
GAM3670 LOC120892 3' TGATGTAGGATCTGCA 83049
                                             T A
                     TGATGTAGG ATT TGTA
                     ACTACATCC TAG ACGT
GAM3670 LOC144571 3' TGAGTAGGCTTCATGTAA 83050
                                            T A
                     TGA GTAGGT TTATGTAA
                     ACT CATCCG AGTACATT
GAM3670 LOC56959 5' TGCATGGTTATTATGTAAA 83051
                     TGTA GGT ATTATGTAAA
                     ACGT CCA TAATACATTT
                       A
GAM3670 LOC91963 5' TGAGTGGGATCATGTAA 83052 T A T
                     TGA GT GG ATTATGTAA
                     ACT CA CC TAGTACATT
                       _ C _
GAM3671 APXL
             3' TAAGTAAGTTATAAATTATAA 83055
                                           CT
                     TAAG AGTTATAAGTTATAA
                     ATTC TCAATATTTAATATT
                       ΑT
GAM3671 CR1
             3' TAAGCTAGTACTTTTATAATAA 83056
                                             TATAAG
                     TAAGCTAGT TTATAATAA
                     ATTCGATCA
                                 AATATTATT
                         TGAA
GAM3671 SHANK2 3' AGCTAGTTCTGAAATAATAA 83057
                                              ATAAGTT
                     AGCTAGTT ATAATAA
                     TCGATCAA
                                TATTATT
                         GACTT
GAM3671 FLJ20420 3' ACCATAATAAGTTATAAT 83058
                                           GTT
                     GCTA ATAAGTTATAAT
                     TGGT TATTCAATATTA
                       \mathsf{AT}_{-}
GAM3671 GRID1 3' GCTAGTTATCACCCTCATAA 83059
                                             AAG
                     GCTAGTTAT TTATAA
                     CGATCAATA
                               AGTATT
                         GTGGG
GAM3671 LOC150279 3' TGACTAGTTACTCAGATATAAT 83060 A
                                                 A_ T
         Α
                      A GCTAGTTAT AG TATAATA
```

1 111111111 11 1111111

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A TGATCAATG TC ATATTAT
                     C
                          AG T
GAM3671 LOC222068 3' AGCTAGTTACAGGCAGTAA 83061
                                               A TA
                     AGCTAGTTATA GT TAA
                     TCGATCAATGT CG ATT
                         C TC
GAM3672 ATP11A 3' GTGCATGTGTGTATTCACGCCT 83064
                                                C___ C
                                             Α
         GCAG
                        GTGCA GTGTGTG CGCC GCAG
                     CACGT CACACAT GCGG CGTC
                           AAGT A
                       Α
GAM3672 CREBBP 3' GTGTACGTGTGCACGCC 83065
                                           CAA
                     GTG GTGTGTGC CGCC
                     CAC CACACACG GCGG
                      ATG
                            Т
GAM3672 EN2
            5' GTGCGTGTGTGCGTGTGCAG 83066
                                            AA
                                                 CGCCC
                     GTGC GTGTGTGC GCAG
                     CACG CACACACG
                                    CGTC
                       CA
                            CACA
GAM3672 IMMP2L 5' CGGGCCAGGTGTGCCGCC
                                   83067
                                          T A T
                     CG GC AG GTGTGCCGCC
                     11 11 11 1111111111
                     GC CG TC CACACGGCGG
                      CG
GAM3672 KCNS2 5' GTGCGAGTGTGTGCGCCCG 83068
                                                С
                     GTGC AGTGTGTGC GCCCG
                     CACG TCACACACG CGGGC
                       С
GAM3672 MAB21L1 5' GTGCTGAGTGTGTCCG 83069
                                           Α
                     GTGC AGTGTGTG CCG
                     CACG TCACACAC GGC
                       AC
                            Α
GAM3672 NDRG1 3' GTGAAGTGTGTGCTGCTAC 83070
                                                C CC
                                           С
                     GTG AAGTGTGTGC GC GC
                     CAC TTCACACACG CG TG
                           ΑА
GAM3672 PTPN18 5' CGGCGAGTGTGGACGCCGC 83071
                                           ΤА
                     CG GC AGTGTG TGCCGC
                     GC CG TCACAC GCGGCG
                      _ C
                           CT
GAM3672 CBX6
             3' CGTGCAAGTGTGTGGGAGGC 83072
                                               CC_
                     CGTGCAAGTGTGTG GC
```

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GCACGTTCACACAC CG
                         CCTC
                                     83073
GAM3672 DKFZP564D172 3' CGTGCGGGTGGGTGCGCC
                                            AA T C
                    CGTGC GTG GTGC GCC
                    GCACG CAC CACG CGG
                      CC C
GAM3672 FHOD2 5' CGGCGGTCGGCTGCCGCCCGCA 83074
                                          T AAG TG
        G
                     CG GC TG TGCCGCCGCAG
                    GC CG GC ACGGCGGCGTC
                     CCA CG
GAM3672 HRH3
            3' GTGCAGGTGTGTGCACGTGCAG 83075
                                               CCC
                                           Α
                    GTGCA GTGTGTGC CG GCAG
                    CACGT CACACACG GC CGTC
                          ΤА
GAM3672 KIAA1243 3' GTGCAAGTGGAGTGGCTTGCAG 83076
                                             T CC CC
                    GTGCAAGTG GTG GC GCAG
                    CACGTTCAC CAC CG CGTC
                       CT __ AA
GAM3672 KIAA1536 3' GTGTGAGTGTGTGTGCAG 83077
                                         CA
                                              CCGCCC
                    GTG AGTGTGTG
                    CAC TCACACAC
                                 CGTC
                     AC
                          ACA
GAM3672 MGC23427 5' TGCGGCGCGCCGCCGC 83078
                                         AAGT
                    TGC GTGTGCCGCCCGC
                    ACG CGCGCGGCGGCG
                     С
GAM3672 RAB3D 5' CGCGTAGGGGGCGCCGCCTGCA 83079
                                           CA TGT
        G
                     CGTG AG GTGCCGCC GCAG
                    GCGC TC CGCGGCGG CGTC
                     A CCC
                              Α
GAM3672 STARD7 3' GTGCATGTGTGCGCTCGCAG 83080
                                               CC
                    GTGCA GTGTGTGC GC CGCAG
                    CACGT CACACACG CG GCGTC
                          _ A
                      Α
GAM3672 STARD7 3' GTGCATGTGTGCGCTCGCAG 83080
                                            Α
                                               CC
                    GTGCA GTGTGTGC GC CGCAG
                    CACGT CACACACG CG GCGTC
                      Α
```

3' CGTGAAGTGTGTGC

83081

CGTG AAGTGTGTG GC

С

CCGCCC

GAM3672 URG4

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GCAC TTCACACAC CG
```

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GAM3672 LOC115110 3' CGTGCAGTGTGTCCAC 83082
                                          Α
                    CGTGCA GTGTGTG CCGC
                    GCACGT CACACAC GGTG
GAM3672 LOC145258 3' CGGGCAAGTGTCCCGC
                                  83083 T GTGCCG
                    CG GCAAGTGT CCCGC
                    GC CGTTCACA
                                GGGCG
GAM3672 LOC149576 3' CGTTAGCCCGCCGCCCGC 83084
                                         GCAAGT G
                    CGT
                        GT TGCCGCCCGC
                    GCA CG GCGGCGGCG
                     AT G
GAM3672 LOC149711 3' GTGCATGTGTGTGTGCAG 83085
                                           A CCGCCC
                    GTGCA GTGTGTG GCAG
                    CACGT CACACAC CGTC
                      Α
                         ACA
GAM3672 LOC153711 5' GTGTATGTGCGCGAGCTCGCAG 83086
                                           CAA
                                                 C C
                    GTG GTGTGTGC GC CGCAG
                    CAC TACACGCG CG GCGTC
                          CT A
GAM3672 LOC155179 5' CGGGCAGCCCTGGCCGCCA 83087 T A G T
                    CG GCA GT TG GCCGCCGCAG
        G
                    GC CGT CG AC CGGCGGGCGTC
                     C GG
GAM3672 LOC196993 5' CGTGGGAGTGTGTGTGTGACC 83088
                                           CA
                                                CC
                    CGTG AGTGTGTG GCC
                    GCAC TCACACAC TGG
                     CC
                          ACAC
GAM3672 LOC257054 3' CGTGCCGGGGCCCTCGCCCGCA 83089 AAGT GTGC
        G
                    CGTGC GT CGCCCGCAG
                    GCACG CG GCGGGCGTC
                      GCCC GGA
GAM3673 SLK
           3' ACAAATCACTGAAATAATTTTT 83092
                                        ATA_
                    ACAGA TGAAATAATTTTT
                    TGTTT ACTTTATTAAAAA
                      AGTG
GAM3673 LOC200132 3' ACTAGAATATGAAAAAATT 83093
                                             Т
                    AC AGAATATGAAA AATT
```

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TG TCTTATACTTT TTAA
                     Α
                          Т
GAM3673 LOC257482 3' CAGGATGTGAAATAATTTTT 83094 A A
                    CAG AT TGAAATAATTTTT
                    GTC TA ACTTTATTAAAAA
                     C
GAM3674 ARHGDIA 3' GGGCTGGAGGACGGCCCGG 83097
                                           CA
                                                 A CA
                    GGGCTGG GGGACGGC CC G
                    CCCGACC TCCTGCCG GG C
                       __ C_
GAM3674 BAI2
            5' GGCGCTGGCGGGGGGCGCCACG 83098
                                          _ A A _ CCA
        GGGC
                       GG GCTGGC GGG CGGC AC GC
                    CC CGACCG CCC GCCG TG CG
                     G C C G CCC
            5' GGACTGGCGGGACCTGGC 83099
GAM3674 CD9
                    GGGCTGGC GGGAC GGC
                    CCTGACCG CCCTG CCG
                       _ GA
GAM3674 CELSR2 3' GGGCTGCTGGGAACACCCAGC 83100
                                            GA CG
                    GGGCTG C GGGA GCACCCAGC
                    CCCGAC G CCCT TGTGGGTCG
                      _ A __
                                              GGG _ ACC
GAM3674 CRYBA2 5' GGGTGGCACCACGCGCTCAGC 83101
                    GGG TGGCA ACG GC CAGC
                    CCC ACCGT TGC CG GTCG
                        GG_ G A_
GAM3674 DNMT3B 5' GGGCTGGCTGGGGCGCGGC 83102
                                            А А
                    GGGCTGGC GGG CGGC
                    CCCGACCG CCC GCCG
                       AC GC
                                             C CAC
GAM3674 EGLN2 5' GGGTGGCAGGGAAGGGGTCCAG 83103
                                           С
                    GGG TGGCAGGGA GG CCAG
                    CCC ACCGTCCCT CC GGTC
                         T CCA
GAM3674 EPHA8
            3' GGGCTGGCAGGGGGCAC 83104
                                            AC
                    GGGCTGGCAGGG GGCAC
                    CCCGACCGTCCC CCGTG
GAM3674 EPHB2 3' GGGCTGGCGGGAGTGGGC 83105
                                           A C__
```

GGGCTGGC GGGA GGC

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CCCGACCG CCCT CCG
                       _ CAC
GAM3674 EPHB2 3' GGGCTGGCGGGAGTGGGC 83105
                                          A C
                    GGGCTGGC GGGA GGC
                    CCCGACCG CCCT CCG
                       _ CAC
GAM3674 FSTL3 3' GGGCTGGCAGGGAATGGTGGCA 83106
                                              C_ CACC
                     GGGCTGGCAGGGA GG CAGC
        GC
                    CCCGACCGTCCCT CC GTCG
                        TA ACC
GAM3674 GAS7
            3' GGGCTGGCAGGGTGGGGGC 83107
                                            AC
                    GGGCTGGCAGGG GGC
                    CCCGACCGTCCC CCG
                        ACCC
GAM3674 GAS7 3' GGGCTGGCAGGGTGGGGGC 83107
                                            AC
                    GGGCTGGCAGGG GGC
                    CCCGACCGTCCC CCG
                        ACCC
GAM3674 ICAM2 5' GGGCTCGCAGGGACCAGC 83108
                                        G
                    GGGCT GCAGGGAC GGC
                    CCCGA CGTCCCTG TCG
                      G
GAM3674 IL6R
           5' GGGCGGCAGGGGTGGCA 83109
                                       Т
                                          AC
                    GGGC GGCAGGG GGCA
                    CCCG CCGTCCC CCGT
                        CA
                                           A A__
GAM3674 JTB
           5' GGGCCGGCGGGGGCTCGCGGC 83110
                    GGGCTGGC GGG CGGC
                    CCCGGCCG CCC GCCG
                       C CGAGC
GAM3674 JUNB 5' GGGCTGGCGCGGGCGGGTAGC 83111
                                          A_ A CACCC
                    GGGCTGGC GGG CGG AGC
                    CCCGACCG CCC GCC TCG
                       CG _ CA_
GAM3674 LDB1
            5' GGGCTGACGGGGGGACAACTTC 83112
                                                 ACC
                                           Α___
        AGC
                     GGGCTGGC GGGACGGC CAGC
                    CCCGACTG CCCTGTTG GTCG
                       CCC
                            AA_{-}
GAM3674 LY64
            3' GGGCCGGCAGTCCCTGCCCAG 83113
                                           GGACGGCA
                    GGGCTGGCAG CCCAG
```

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CCCGGCCGTC GGGTC
                       AGGGAC
GAM3674 MMP11 3' GGCCTGGCAGGGGTCAGC 83114 G
                   GG CTGGCAGGG CGGC
                   CC GACCGTCCC GTCG
                    G
                        CA
GAM3674 NAV2 5' GGACTGGCCACGGCGCTCAGC 83115 AGGG ACC
                   GGGCTGGC ACGGC CAGC
                    CCTGACCG TGCCG GTCG
                      G CGA
GAM3674 NEU1 3' GGGTGGTGGGGCCACACTTAGC 83116 C CA ACG CC
                   GGG TGG GGG GCAC AGC
                   CCC ACC CCC TGTG TCG
                     AC GG AA
GAM3674 NFATC2 5' GGGCTGGCGGAGGCGGCTCGAG 83117 A A ACCC
        C
                    GGGCTGGC GGG CGGC AGC
                   CCCGACCG CTC GCCG TCG
                       C C AGC_
GAM3674 PDCD2 5' GGGCTGGCGTGGGGCGCAG 83118
                                         AG AC ACC
                   GGGCTGGC GG GGC CAG
                    CCCGACCG CC CCG GTC
                       CA __ C__
GAM3674 PLA2G4B 3' GGGTGGCAGGGGCCCCG 83119 C
                                            ACG A A
                   GGG TGGCAGGG GC CCC G
                   CCC ACCGTCCC CG GGG C
                          _ C
           3' GGGCTGGCGAGGACTGTGGC 83120
GAM3674 PML
                                          AG
                   GGGCTGGC GGAC GGC
                   CCCGACCG CCTG CCG
                       CT ACA
           3' GGGCTGGCGAGGACTGTGGC 83120
GAM3674 PML
                                          AG __
                   GGGCTGGC GGAC GGC
                    11111111 1111 111
                    CCCGACCG CCTG CCG
                       CT ACA
GAM3674 RCN2 5' AGGCTGGCGGGGGCCCGGGC 83121
                                         A AC A CA
                   GGGCTGGC GGG GGC CC GC
                   TCCGACCG CCC CCG GG CG
                       _ _ cc
GAM3674 SH3BP2 3' GGGTGGCAGGGAGCCTGGC 83122
                                             C___
                   GGG TGGCAGGGA GGC
```

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CCC ACCGTCCCT CCG
                         CGGA
GAM3674 SLC39A4 5' GGGCCGGCAGGGGGAGTTGGC 83123
                                              AC
                    GGGCTGGCAGGG GGC
                         III
                    CCCGGCCGTCCC
                                  CCG
                        CCTCAA
GAM3674 SLC8A2 5' GGGCTGGCAGTGGTGGGC 83124
                                           _ AC
                    GGGCTGGCAG GG GGC
                    CCCGACCGTC CC CCG
                        A AC
GAM3674 SNL
            3' GGGTTAGCAGGGAGGGTTGGC 83125
                                             C____
                    GGG TGGCAGGGA GGC
                    CCC ATCGTCCCT CCG
                         CCCAA
GAM3674 TRPV3 3' GGGCTGACGGGGGAAGCTGGC 83126
                                            A_ C___
                    GGGCTGGC GGGA GGC
                    CCCGACTG CCCT CCG
                       CC TCGA
GAM3674 ARHGAP8 3' GGGCTGGCGGGACGGACGCAG 83127
                                                  CC
                    GGGCTGGC GGGACGG AC CAG
                    CCCGACCG CCCTGCC TG GTC
                       _ C C
GAM3674 ARHU
           5' GGGCTAGCAGGGCCCGGC 83128
                                            Α
                    GGGCTGGCAGGG CGGC
                    CCCGATCGTCCC GCCG
                        GG
GAM3674 C20orf110 3' GGGTTGGAGGGAGATTCAGC 83129 C C
                    GGG TGG AGGGA CGGC
                    CCC ACC TCCCT GTCG
                     A _ CTAA
GAM3674 CLPTM1 3' GGGCTGGCAGGGCGAGATGGC 83130
                                              AC__
                    GGGCTGGCAGGG GGC
                    CCCGACCGTCCC
                                  CCG
                        GCTCTA
GAM3674 COTL1 5' GGGCTGGCGGCGGTGGCGACGG 83131
        C
                     GGGCTGGC
                               GG GACGGC
                    CCCGACCG
                             CC CTGCCG
                       CCGCCA G
GAM3674 CTNNBIP1 5' GGGCCGGCAGGGGCAGCGGGTC 83132
                                                A AC_ A
        CGGC
                      GGGCTGGCAGGG CGGC CC GC
```

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CCCGGCCGTCCC GTCG GG CG
                         C CCCA C
GAM3674 CXYorf1 3' GGGTGGGCAGAAAGCACCCAG 83133 CT
                                               AC
                    GGG GGCAGGG GGCACCCAG
                    CCC CCGTCTT TCGTGGGTC
                     AC
GAM3674 DD96
            3' GGGCTGGAGGGAGTCAGC 83134
                                          С
                    GGGCTGG AGGGA CGGC
                    CCCGACC TCCCT GTCG
                       _ CA
GAM3674 DKFZp434N035 3' GGGCGGCAGGGAGCGCCTAGC 83135
                                               Т
                                                   CG A C
                    GGGC GGCAGGGA GC CC AGC
                    CCCG CCGTCCCT CG GG TCG
                         CA
                                                   C __ CA
GAM3674 DKFZp547M072 3' AGGTTGGCAGGGAGGACCGACC 83136 C
        TGGC
                      GGG TGGCAGGGA GGC ACC GC
                    TCC ACCGTCCCT CTG TGG CG
                     Α
                         C GC AC
GAM3674 EPN2
            3' GGGCTGGCAGGTGGTCAGC 83137
                                            GA
                    GGGCTGGCAGG CGGC
                    CCCGACCGTCC GTCG
                        ACCA
GAM3674 FAF1
            5' GGGCTGGCGGGCGAGCCGGC 83138
                                            Α _ __
                    GGGCTGGC GG GA CGGC
                    CCCGACCG CC CT GCCG
                       CGCG
GAM3674 FLJ00001 3' GGGCTGGCGGAGGCGGCA 83139
                                           A A
                    GGGCTGGC GGG CGGCA
                    CCCGACCG CTC GCCGT
                       C
GAM3674 FLJ10815 3' GGGCTGGCAGGGGAGGAGGC 83140
                                              AC___
                    GGGCTGGCAGGG GGC
                    CCCGACCGTCCC
                                 CCG
                         CTCCT
GAM3674 FLJ12089 5' GGGCTGGGGACGGCGCCCTAG 83141
                                             CAG
                                                   A__ C
        C
                     GGGCTGG GGACGGC CCAGC
                    CCCGACC CCTGCCG GG TCG
                            CGC A
GAM3674 FLJ12122 5' GGGCTGGCAGGGATGAGC 83143
                                             C _
```

GGGCTGGCAGGGA G GC

```
CCCGACCGTCCCT C CG
                         ΑТ
GAM3674 FLJ12122 5' GGGCTGCAGGGACCTGGGC 83142
                                           G
                    GGGCTG CAGGGAC GGC
                    CCCGAC GTCCCTG CCG
                          GAC
GAM3674 FLJ20186 5' GGGCTCGCAGGGACAGGATGGC 83144
                                             G
                    GGGCT GCAGGGAC GGC
                    CCCGA CGTCCCTG CCG
                      G
                          TCCTA
GAM3674 FLJ20359 3' GGGCTGGCAGGGACTGAGC 83145
                    GGGCTGGCAGGGAC GGC
                    CCCGACCGTCCCTG TCG
                          AC
GAM3674 FLJ21817 3' GCTGGCAGGGACAGGACAGC 83146
                                               CACC
                    GCTGGCAGGGACGG CAGC
                    CGACCGTCCCTGTC GTCG
                          CT_
GAM3674 FLJ22341 3' GGCATGGTGGGCACCCAG 83147
                                          _ GAC
                    GGCA GG GGCACCCAG
                    CCGT CC CCGTGGGTC
                      A AC
GAM3674 FLJ23119 3' GGGATGGCAGGAAGGCCCGGC 83148
                                                C A CA
                                            С
                    GGG TGGCAGGGA GGC CC GC
                    CCC ACCGTCCTT CCG GG CG
                     Т
GAM3674 FLJ23191 5' GGGCTGGCGCGGGCTTCGCCGG 83149
                                              A_ A___
        C
                     GGGCTGGC GGG CGGC
                    CCCGACCG CCC
                                   GCCG
                       CG GAAGCG
GAM3674 FLJ25416 3' GGGCTGGCAGGAAGACAACCAG 83150
                                                C C
        C
                     GGGCTGGCAGGGA GGCA CCAGC
                    CCCGACCGTCCTT CTGT GGTCG
                           Т
GAM3674 FLJ32356 3' GGCCTGGCAGGGGACTTTTGGC 83151 G
                    GG CTGGCAGGG AC GGC
```

G

GAM3674 FXYD5 3' GGGCTTGGTCTTCGGGTGCCCA 83152

GC

CC GACCGTCCC TG CCG C AAAA

GGGCT GG CGC CCCAGC

_ CAGGGA CA_

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CCCGA CC GCC GGGTCG
                      A AGAA_ CAC
                                        TG _ _
GAM3674 GIT1 3' GGGCACCAGGGCACCTGGC 83153
                    GGGC G CAGGG AC GGC
                    CCCG T GTCCC TG CCG
                     _G G GA
GAM3674 GOLPH2 3' AGGCTGGCACCAGCAC
                                         GGGA
                                 83154
                    GGGCTGGCA CGGCAC
                    TCCGACCGT GTCGTG
                       G
GAM3674 GPS1
            3' AGGCTGGGTGGCACCCAG 83155
                                         CAGGGAC
                    GGGCTGG
                             GGCACCCAG
                    TCCGACC
                             CCGTGGGTC
                      CA
GAM3674 HEMK 3' GGGTGGCAGGGGCA
                                83156 C
                                          AC
                    GGG TGGCAGGG GGCA
                    CCC ACCGTCCC CCGT
                                           _ ACG A A
           3' GGGCTGGCGAGGGTGCGCCCGG 83157
GAM3674 jdp2
        С
                    GGGCTGGC AGGG GC CCC GC
                    CCCGACCG TCCC CG GGG CG
                       CACC
GAM3674 KIAA0205 5' GGGCTGGCCGGGCCCCAG 83158
                                           AGGGAC A
                    GGGCTGGC GGC CCCAG
                    CCCGACCG
                              CCG GGGTC
                       GC
GAM3674 KIAA0476 5' GGGCGGCGGGGCTACCCG 83159 T A ACG A
                    GGGC GGC GGG GC ACCC G
                    CCCG CCG CCC CG TGGG C
                     _ _ A C
GAM3674 KIAA0544 3' GGGCTGGCAGGTAGATGTCAGC 83160
                                              GA
                    GGGCTGGCAGG
                                 CGGC
                    GTCG
                    CCCGACCGTCC
                        ATCTACA
GAM3674 KIAA0854 3' GGGCTGGCTGGCACAGC 83161
                                          Α _
                    GGGCTGGC GGG ACGGC
                    CCCGACCG CCC TGTCG
                       A G
GAM3674 KIAA0964 3' GGGCTGGCGGGGCACCTCCCAG 83162
                                             A A G A_
                    GGGCTGGC GGG CG C CCCAG
```

```
CCCGACCG CCC GT G GGGTC
                       C _ _ GA
GAM3674 KIAA1037 3' GGGCCGGCACTGCACCTG 83163
                                           GGGACG CA
                    GGGCTGGCA GCACC G
                    CCCGGCCGT CGTGG C
                       GA____ AC
GAM3674 KIAA1199 3' GGGCTGGGGGACCCA
                                 83164
                                        CA CGGCA
                    GGGCTGG GGGA CCCA
                    CCCGACC CCCT GGGT
GAM3674 KIAA1677 5' GGGCGCCGGGACGGCACTCGGC 83165
                                            TG A
                                                   CCA
                    GGGC GC GGGACGGCAC GC
                    CCCG CG CCCTGCCGTG CG
                      G
                            AGC
GAM3674 KIAA1754 3' GGGCTGCTGAGCTGGCACCCAG 83166
                                            GA AC
                    GGGCTG C GGG GGCACCCAG
                    CCCGAC G CTC CCGTGGGTC
                      _A GA
GAM3674 KIAA1872 5' GGGCTGGCAGAGGCTCGGC 83167
                    GGGCTGGCAG GG CGGC
                    CCCGACCGTC CC GCCG
                       T GA
GAM3674 MAPKAPK2 3' GGGCGGCAGGGGTGGGAG 83168
                                              AC CACCC
                                         Т
                    GGGC GGCAGGG GG AG
                    CCCG CCGTCCC CC TC
                         CA C_
GAM3674 MGC11335 5' AGGCTGGCGGGGATGCGCGGGC 83169
                                              A C
                    GGGCTGGC GGGA GGC
                    TCCGACCG CCCT
                                  CCG
                       C ACGCGC
GAM3674 MGC12921 3' GGGCTGTGGCGTGTGCACCCGG 83170
                                             GCAG ACG__ A
        C
                    GGGCTG GG GCACCCGC
                    CCCGAC CC CGTGGG CG
                      A___ GCACA
                                 С
GAM3674 MGC2306 3' GGGCTGGCAGGAGTGGTGTCGG 83171
        C
                    GGGCTGGCAGGG
                                   CGGC
                    Ш
```

CCCGACCGTCCT

GAM3674 MGC2752 5' GGGCTGGCGGGGCTTCGGC 83172

CACCACA

GGGCTGGC GGG CGGC

GCCG

ΑА

```
CCCGACCG CCC GCCG
                      C GAA
GAM3674 MGC4504 3' GGGCTGGCCGGGGCCTCAG 83173
                                         A ACG ACC
                   GGGCTGGC GGG GC CAG
                   CCCGACCG CCC CG GTC
                      G ___ GA_
GAM3674 moblak 3' GGGTGGCAGGGGTTCAGC 83174
                                       С
                   GGG TGGCAGGG CGGC
                   CCC ACCGTCCC GTCG
                        CAA
GAM3674 MSRA
            5' GGGCGCAGGGGCGCGGC 83175
                                            Α ____
                   GGGC GGCAGGG C GGC
                   CCCG CCGTCCC G CCG
                        C CGC
GAM3674 NIFU 5' GGGCAGGCGGGGGCTCCGCAGC 83176 T A AC A
                   GGGC GGC GGC CC CAGC
                   CCCG CCG CCC CCG GG GTCG
                     T _ _ A C
GAM3674 OBSCN 3' GGGCTGGCCAGCACCTG
                                         AGGGA
                                                CA
                                83177
                   GGGCTGGC CGGCACC G
                   CCCGACCG GTCGTGG C
                             AC
GAM3674 P5CR2 3' GGGTGGCAGGGGCGCA 83178
                                       С
                                           Α
                   GGG TGGCAGGG CGGCA
                   CCC ACCGTCCC GCCGT
                        С
GAM3674 PRO0149 3' GGGCTGTTGTTGGGCACCCAG 83179
                                          GCAGGGAC
                   GGGCTG
                          GGCACCCAG
                   CCCGAC
                            CCGTGGGTC
                      AACAAC
GAM3674 RAB11B 3' GGGCTGGCTGGCCACCC 83180
                                          A ACGG
                   GGGCTGGC GGG CACCC
                   CCCGACCG CCC GTGGG
                      A G
GAM3674 RAI1
           3' GGACTGGCAGGGACTGGC 83181
                   GGGCTGGCAGGGAC GGC
                   CCTGACCGTCCCTG CCG
```

Α

GGGCTGGC GGG CGGC

A_ A

GAM3674 RNF10 5' GGGCCGGCGGGGGTCGGC 83182

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CCCGGCCG CCC GCCG
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CC A GAM3674 SH3BGRL2 5' GGGCTGGCGTGGACGCAGAGC 83183 AG G CCC GGGCTGGC GGACG CA AGC CCCGACCG CCTGC GT TCG CA _ C__ GAM3674 TMPIT 3' GGGCCGGCAGGGGAAGGCCCAG 83184 AC_ AC С GGGCTGGCAGGG GGC CCAGC CCCGGCCGTCCC CCG GGTCG CTT GAM3674 TREX2 5' GCTGGCAGCACTCGCCCAGC 83185 G G GGCA GCTGGCA G AC CCCAGC CGACCGT C TG GGGTCG G AGC GAM3674 TREX2 5' GCTGGCAGCACTCGCCCAGC 83185 G G GGCA GCTGGCA G AC CCCAGC CGACCGT C TG GGGTCG _G AGC_ GAM3674 WBSCR20A 5' GGCGCTGGAGATCACGGCATCC 83186 C G C GG GCTGG AGG ACGGCA CCAGC AGC CC CGACC TCT TGCCGT GGTCG G _ AG A GAM3674 ZFP36L2 5' GGGCCGGCGGGAGGGTCCGGC 83187 Α GGGCTGGC AGGG CGGC CCCGGCCG TCCC GCCG CCC AG GAM3674 LOC112868 5' GGGCTGGGAGGACCCGGC 83188 **GGGCTGG AGGG CGGC** CCCGACC TCCT GCCG C GG GAM3674 LOC115073 5' GGACTGGCATGGGCGCCTGGC 83189 _ AC___ GGGCTGGCA GGG GGC CCTGACCGT CCC CCG A GCGGA GAM3674 LOC123591 5' GGGCCGGCGGGGGCCTCCAGC 83190 A AC AC GGGCTGGC GGG GGC CCAGC CCCGGCCG CCC CCG GGTCG _ __ GA GAM3674 LOC126528 3' GGTTGGCAGGGCGTGCCCAGC 83191 C A GCA GG TGGCAGGG CG CCCAGC

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CC ACCGTCCC GC GGGTCG
                     A _ AC_
GAM3674 LOC143677 5' GAGCTGGCAGGGGACTCCCAG 83192
                                              AC A
                    GGGCTGGCAGGG GGC CCCAG
                    CTCGACCGTCCC CTG GGGTC
GAM3674 LOC144455 5' GGGCTGGCGGGGACCCCGC 83193
                                            A GGCA A
                    GGGCTGGC GGGAC CCC GC
                    CCCGACCG CCCTG GGG CG
GAM3674 LOC146378 3' GGCAGGCGAGGGCGCCCAG 83194
                                            _ C A
                    GGCAGG GA GGC CCCAG
                    CCGTCC CT CCG GGGTC
                      GCC
GAM3674 LOC147645 5' GGGTGGGCGGGGGCCGCCA 83195 CT A
                                                    AC
        GC
                     GGG GGC GGGACGGC CCAGC
                    CCC CCG CCCTGCCG GGTCG
                     AC C
                           GC
GAM3674 LOC149373 3' GGGTTGCTGGATAAACACCCAG 83196
                                           CTG A AC
                    GGG GC GGC GCCCCAGC
        С
                    CCC CG CCT TTGTGGGTCG
                     AA_ A AT
GAM3674 LOC152065 5' AGGCTGGCAGGGCCCTGGC 83197
                                              AC
                    GGGCTGGCAGGG GGC
                    TCCGACCGTCCC CCG
                        GGGA
GAM3674 LOC161344 5' GGGCTAGCAGGGGGCTGAGCAC 83198
                                               AC_
        CCAGC
                       GGGCTGGCAGGG GGCACCCAGC
                    CCCGATCGTCCC TCGTGGGTCG
                        CCGAC
GAM3674 LOC162137 3' GGGCGGGCGGGCTGCCTGTCCA 83199
                                             T A AC AC_
        GC
                     GGGC GGC GGC CCAGC
                    CCCG CCG CCC CCG GGTCG
                     C GA ACA
GAM3674 LOC163682 3' GGGTTGCTGCCTGGCACCCAGC 83200 CTG AGGGAC
                    GGG GC GGCACCCAGC
                    CCC CG CCGTGGGTCG
                     AA_ ACGGA_
GAM3674 LOC196410 3' GGCTTGGCAGGGATGCAGGC 83201
                                              C___
                    GGCT GGCAGGGA GGC
```

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CCGA CCGTCCCT CCG
                          ACGT
GAM3674 LOC200093 3' GGGTGGGCAGAAAGCACCC 83202
                                           CT
                                               AC
                    GGG GGCAGGG GGCACCC
                    CCC CCGTCTT TCGTGGG
                     AC
GAM3674 LOC201689 3' GGGTCTGGCAGGCACCCAG 83203
                                              GGGAC
                    GGG CTGGCA GGCACCCAG
                    CCC GACCGT CCGTGGGTC
GAM3674 LOC202284 5' GGGCTGGTAGGGGACTCAG 83204
                                            C AC ACC
                    GGGCTGG AGGG GGC CAG
                    CCCGACC TCCC CTG GTC
                       A A
GAM3674 LOC206836 5' GGGTTGGCAGGAGCAGCA 83205 C
                                              GA
                    GGG TGGCAGG CGGCA
                    CCC ACCGTCC GTCGT
                     Α
                         TC
GAM3674 LOC219920 5' AGGCTGGCATAGTGCCCAG 83206
                                             G ACGGCA
                    GGGCTGGCA GG
                                 CCCAG
                    TCCGACCGT TC
                                 GGGTC
                        A AC
GAM3674 LOC245727 3' GGGCGGCAGGACCCA
                                            GACGGC
                                  83208
                                         Т
                    GGGC GGCAGG
                                 ACCCA
                    CCCG CCGTCC
                                 TGGGT
GAM3674 LOC245727 3' GGGTGGCAGGGCCCA
                                  83207
                                        С
                                             ACGGCA
                    GGG TGGCAGGG
                                  CCCA
                    1111
                    CCC ACCGTCCC
                                  GGGT
```

GAM3674 LOC253128 3' AGGCTGGCAGGGGCCCCA 83209 ACG A

GGGCTGGCAGGG GC CCCA

||||||||||||||||

TCCGACCGTCCC CG GGGT

GAM3674 LOC255057 5' GGGCTGGCGGCGGGCGGC 83210 A_ A

GGGCTGGC GGG CGGC

|||||||||||||||||||

CCCGACCG CCC GCCG

CCG _

GAM3674 LOC255826 5' GGGCTGGCAGGAGCAAGAGC 83211 CG CCC

GGGCTGGCAGGGAGCAAGAGC 83211 CG CCC

GGGCTGGCAGGGAAGAGC 83211 CG CCC

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CCCGACCGTCCCT CGT TCG
                         __ TC_
GAM3674 LOC51112 5' GGGCTGGCGGGGGCCGGGGAGC 83212
                                              A A CACCC
                    GGGCTGGC GGG CGG AGC
                    CCCGACCG CCC GCC TCG
                       C CG CC
GAM3674 LOC91040 3' GGGTTGGGCAGAAAGCACCC 83213
                                          CT
                                               AC
                    GGG GGCAGGG GGCACCC
                    CCC CCGTCTT TCGTGGG
                     AAC
GAM3674 LOC92148 5' GGGCGGCAGGGCGAGACTCAG 83214 T A C C
                    GGGC GGCAGGG CGG AC CAG
                    CCCG CCGTCCC GCT TG GTC
                         СА
GAM3675 MTCP1 5' AGGGTTCTATGGCAATT 83217
                                         TATCAT
                    AGGGTTCTAT CAATT
                    TCCCAAGATA GTTAA
                        CC___
GAM3675 MYBL1 5' TAGAGTCCAATCATCAGTTCC 83218 TATT A
                    TAGGGTTC ATCATCA TTCC
                    ATCTCAGG TAGTAGT AAGG
                       T C
GAM3675 TIAM1 3' GGATTCTGATCAATTC 83219
                                       ATTATC
                    GGGTTCT ATCAATTC
                    CCTAAGA TAGTTAAG
                      С
                                        C A AA
GAM3675 FHX 3' TAGGATTTTATTGTCACCCTCC 83220
                    TAGGGTT TATT TCATC TTCC
                    ATCCTAA ATAA AGTGG GAGG
                      A C _
GAM3675 KIAA1582 5' GAGGTACCATCATCAATT 83221
                                       TTC
                    GGG TATTATCATCAATT
                    CTC ATGGTAGTAGTTAA
                     \mathsf{C}_{-}
GAM3675 LOC202460 5' TAGAGTTGGTTCATCAATT 83222
                                          CTATTA
                    TAGGGTT TCATCAATT
                    ATCTCAA AGTAGTTAA
                      CCA_{-}
```

GAM3675 LOC222444 3' TAGGGATTCAGTCTCATCGATT 83223

TAGGG TTC TCATC ATT

_ TATTA A

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T TCAG C
GAM3676 CHRNB2 3' TTGGCAGGAATCGCTGACCACT 83226 AA TTGCG
                                                     С
        GT
                     TTG AG GCTGACCAC GT
                    AAC TC CGACTGGTG CA
                     CG CTTAG
GAM3676 DKFZp761F2014 3' CTGGGAGTTGCAGATCACTGT 83227 AA
                                                   CTGAC C
                    TTG AGTTGCGG CAC GT
                    GAC TCAACGTC GTG CA
                          TA ___ A
                     CC
GAM3676 OPRL1 5' TTGGGAGCTGGGACCACCG 83228
                                        AA C CTG
                    TTG AGTTG GG ACCACCG
                    AAC TCGAC CC TGGTGGC
                     CC
GAM3676 LOC196746 5' TTGGAGGTGTGGCTGGTCAC 83229 AA T C AC
                    TTG AG TG GGCTG CAC
                    AAC TC AC CCGAC GTG
                     C_ C A CA
GAM3676 LOC200226 3' TGGGAGTTGCGGGCAGGCCGT 83230 AA
                                                TGACCA
                    TG AGTTGCGG C CCGT
                    AC TCAACGCC G GGCA
                     CC
                          C TCC
GAM3677 CLCN3 3' TTGCATGTGAGCAAACAG 83233
                                          A CTT
                    TTGCATGT AGC ATAG
                    AACGTACA TCG TGTC
                       C TT
GAM3677 DIO3 3' TTGCACGTGGGCTTCGAAGG 83234
                                          AA C ATA
                    TTGCATGT GC TT GAGG
                    AACGTGCA CG AA TTCC
                       CC _ GC_
GAM3677 GYPA 3' ATGTAATAACGCCTTATAGAGG 83235
                    ATGTAA GCCTTATAGAGG
                    TACATT CGGAATATCTCC
                      ATTG
GAM3677 SCML2 3' TTGTGTGTAAACCTACAG 83236 CA
                                             Т
                    TTG TGTAAGCCT ATAG
                    AAC ACATTTGGA TGTC
                     AC
GAM3677 STAC 3' TTGCATGTGGCATCAGAGAGG 83237
                                           AA C T
                    TTGCATGT GC TTA AGAGG
```

ATCCC AAG AGTAG TAA

```
AACGTACA CG AGT TCTCC
                       C_T C
GAM3677 ALDH9 5' TTGCATGTAAGCATCCTAG 83238
                                           CA
                    TTGCATGTAAGC TT TAG
                    AACGTACATTCG AG ATC
                         T G
GAM3677 FLJ12661 5' TTGCATGTGGTCGGCATGGAGG 83239 AAGCCT A
                    TTGCATGT
                              TAT GAGG
                    AACGTACA GTA CTCC
                       CCAGCC C
GAM3677 FLJ22569 3' TTGCATGTAACTTTTTTATTGA 83240
                                             GCC A
        GG
                      TTGCATGTAA TTAT GAGG
                    AACGTACATT AATA CTCC
                        GAAAA A
GAM3677 FLJ32865 3' TTACATGCACATTTTTTATAGG 83241
                                            AGCC A
        G
                     TTGCATGTA TTATAG GG
                    AATGTACGT
                               AATATC CC
                        GTAAAA _
GAM3677 KIAA0469 3' TTGATGTAAGCCCCTGGCAGGG 83242
                                            С
                    TTG ATGTAAGCCTT TAG GG
                    AAC TACATTCGGGG GTC CC
                          ACC _
GAM3677 KIAA1553 3' TTGCATGTGGTCGTAAAGG 83243
                                           AAGCC TA
                    TTGCATGT T TAGAGG
                    AACGTACA A ATTTCC
                       CC GC
GAM3677 KIAA1775 3' TTGCATGCAAGCTGTAAGG 83244
                                             CTTATA
                    TTGCATGTAAGC GAGG
                    AACGTACGTTCG
                                  TTCC
                         ACA
GAM3677 KIAA1948 5' TTACATGTAGGCCAGAG
                                  83245
                                         A TTAT
                    TTGCATGTA GCC AGAG
                    AATGTACAT CGG TCTC
                        С
GAM3677 LOC113230 3' ACTGTAAGTTTTATAGAGG 83246 A
                                             CC
                    GC TGTAAG TTATAGAGG
                    TG ACATTC AATATCTCC
GAM3677 LOC120939 3' GCGTGTGTCACTATAGAGG 83247 A AA_ CT
```

GC TGT GC TATAGAGG

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CG ACA TG ATATCTCC
                      C CAG __
GAM3677 LOC158038 5' TTGCATGTGGCCAAAAG 83248
                                            AA TTAT
                     TTGCATGT GCC AGAG
                     AACGTACA CGG TTTC
                        C_ T___
GAM3677 LOC169545 5' TGTAATGCTTATTATAGAGG 83249
                                            _ C__
                     TGTAA GC TTATAGAGG
                     ACATT CG AATATCTCC
                       A AAT
GAM3677 LOC170063 3' TTACATATTTATAGAG
                                  83250
                                           AAGCC
                     TTGCATGT TTATAGAG
                     AATGTATA AATATCTC
GAM3677 LOC170409 3' TTGCATATAAGTCTGGAGG 83251
                                              C TATA
                     TTGCATGTAAG CT GAGG
                     AACGTATATTC GA CTCC
                         A C___
GAM3677 LOC89932 3' TTGCATGTTGGCCTCAGGAGG 83252
                                              AA TA
                     TTGCATGT GCCTTA GAGG
                     AACGTACA CGGAGT CTCC
                        AC
GAM3678 MGC24976 5' TATCTTGTCAAAATTGGT 83255
                                              TAGTC
                     TATTTTGTCAAA ATTGGT
                     ATAGAACAGTTT TAACCA
GAM3678 PA26 3' TATTTTGTCTACCATTGGT 83256
                                           AAA G
                     TATTTTGTC TA TCATTGGT
                     ATAAAACAG AT GGTAACCA
GAM3678 SLC26A7 3' TTTGTCAATTATCCTGTTGGT 83257
                                             A GTA_
                     TTTGTCAA TA C TTGGT
                     AAACAGTT AT G AACCA
                        A AG AC
                                             CAAA _ _ _
GAM3678 TRPC3 3' TATTTTGTTGGCAGTTCAGTTG 83258
                      TATTTTGT TAGT CA TTGGT
         GT
                     ATAAAACA GTCA GT AACCA
                        ACC_ A C
GAM3679 OPCML 3' CAAATGAAACTTACGTTTT 83261
                                            TTT _
                     CAAATGGA ACT ACGTTTT
```

GTTTACTT TGA TGCAAAA ___ A GAM3679 LOC154428 3' ACACGTGACATTTATTACGTTT 83262 AA _ C Т GCA TGG ATTTA TACGTTTT TGT ACT TAAAT ATGCAAAA GC G A GAM3680 IFNAR2 3' TATTTCACAGAAATATCACAGG 83265 _ A G GAA GC TATTTCAC GAAA AT AT GGC ATAAAGTG CTTT TA TG CCG TAGTC GAM3680 FLJ20972 3' TATTTCACTGAAAATTCCTGTA 83266 GA GA A GG TATTTCAC AAAAT TG AGG ATAAAGTG TTTTA AC TCC AC AGG A GAM3680 NUDT5 3' TATTTTACGAAAAAGCTAATGG 83267 С TGA A C TATTT ACGAAAAA TGA GGC ATAAA TGCTTTTT ATT CCG Α CG_ A GAM3680 LOC170395 3' TATTTCACAGAAAGTGTTAAGG 83268 A A ATG С TATTTCACG AAA TG AAGGC ATAAAGTGT TTT AC TTCCG CCAA GAM3680 LOC256239 3' TATTTCACTGGGGAATGATGAA 83269 GAAA TATTTCAC AATGATGAAGG GA ATAAAGTG TTACTACTTCT **ACCCC** GAM3680 LOC90462 3' TTCAAAAAAATGATGGGGG 83270 С AATTCA GAAAAATGATG GG AAGT TTTTTTACTAC CC CC GAM3681 ACCN1 3' TAGCAGAGAGTCCCATGG 83273 TAC G TAGCAGAG GTTC CATGG ATCGTCTC CAGG GTACC T___ _

GAM3681 CD5 3' CAGCAGAGTGTGAGCTGG 83274 AC TC A
TAGCAGAGT GT GC TGG
||||||||| || || ||
GTCGTCTCA CA CG ACC
__ CT _

GAM3681 MTMR3 3' CAGCAGAGTCAAGCATGG 83275 A TTC
TAGCAGAGT CG GCATGG
||||||||| || |||||

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GTCGTCTCA GT CGTACC
                        _ T__
GAM3681 STARD5 3' GCCAGAGTGCATCGCATGG 83276 A T
                    GC AGAGT CGT CGCATGG
                    CG TCTCA GTA GCGTACC
                     G C _
GAM3681 C1orf24 3' GCAGAGTAAATACATGG
                                         C TC
                                 83277
                    GCAGAGTA GT GCATGG
                    CGTCTCAT TA TGTACC
                       Т
GAM3681 CENTA2 3' TAGCAGAATGCCCCTAATG 83278
                                           AC GC
                    TAGCAGAGT GTTC ATG
                    ATCGTCTTA CGGG TAC
                        GAT
GAM3681 DEPP 3' CAGCAGAGTGCCCCAGTGG 83279
                                           AC G
                    TAGCAGAGT GTTC CA TGG
                    GTCGTCTCA CGGG GT ACC
                       __ C
GAM3681 EBNA1BP2 5' TAGCAGAGGGCGGCCCTGG 83280
                                             TA TTC A
                    TAGCAGAG CG GC TGG
                    ATCGTCTC GC CG ACC
                       CC ___ GG
GAM3681 EFA6R 3' GCAGAGCAGTGGCATGG 83281
                                          C TC
                    GCAGAGTA GT GCATGG
                    CGTCTCGT CA CGTACC
                       _ C_
                                          AC C
GAM3681 KIAA1243 3' AGCAAAGTGTTTGCATGG 83282
                    AGCAGAGT GTT GCATGG
                    TCGTTTCA CAA CGTACC
                       __ A
GAM3681 KIAA1462 3' TAGCAGAGTTGTCAGTGG 83283
                                           AC CGCA
                    TAGCAGAGT GTT TGG
                    ATCGTCTCA CAG ACC
                        A_ TC__
GAM3681 NUDEL 3' CAGCAGAGTGGGGGCTATGG 83284
                                            ACGTTC _
                    TAGCAGAGT GC ATGG
                    GTCGTCTCA CG TACC
                       CCCC__ A
GAM3681 OBTP
            3' TAGTGGAAAGCTTCGCATGG 83285
                                         C__ ACG
                    TAG AGAGT TTCGCATGG
```

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ATC TTTCG AAGCGTACC
                     ACC
GAM3681 PDGFC 3' TAGTGGAATACGTACATGG 83286
                                              TC
                                       CA
                    TAG GAGTACGT GCATGG
                    ATC CTTATGCA TGTACC
                     AC
GAM3681 REPRIMO 3' TAGCAAAGTGGGCAGGCGTGG 83287 AC TC A
                    TAGCAGAGT GT GC TGG
                    ATCGTTTCA CG CG ACC
                        CC TC C
GAM3681 SFXN5 3' CAGCAGAGTGGGGCATGG 83288
                                           ACGTTC
                    TAGCAGAGT GCATGG
                    GTCGTCTCA CGTACC
                        CCC
GAM3681 SIMRP7 3' GCAGAGCAGCCGTGTGG 83289
                                         C T CA
                    GCAGAGTA GT CG TGG
                    CGTCTCGT CG GC ACC
                       _ _ AC
GAM3681 ZNF361 5' TAGCAGGTACCACATG
                                       A GTT
                                 83290
                    TAGCAG GTAC CGCATG
                    ATCGTC CATG GTGTAC
GAM3681 LOC145978 5' GCAGGGCAATCGCATGG 83291 A CGT
                    GCAG GTA TCGCATGG
                    CGTC CGT AGCGTACC
                      C T__
GAM3681 LOC153328 3' TAGCAGAGTGGGCATTGG 83292
                                            ACGTTC _
                    TAGCAGAGT GCAT GG
                    ATCGTCTCA CGTA CC
                        CC____ A
GAM3681 LOC220070 3' TAGCAGAGCATCCCAGTGG 83293
                                             CGT G _
                    TAGCAGAGTA TC CA TGG
                    ATCGTCTCGT AG GT ACC
                        __ G C
GAM3681 LOC254778 3' TAGCAGAGGTGCGTGTGG 83294
                                            TAC T CA
                    TAGCAGAG GT CG TGG
                    ATCGTCTC CA GC ACC
                        __ C AC
GAM3681 LOC90355 3' ACAGAGTACAGCAGTGG
                                   83295
                                            TTC _
                    GCAGAGTACG GCA TGG
```

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TGTCTCATGT CGT ACC
                        ___ C
                                         AC C GC
GAM3682 DUSP4 5' TGTCATGGGCATTGTATTAC 83298
                    TGTCATGG CAT GTG TAC
                    ACAGTACC GTA CAT ATG
                       C_ A A_
GAM3682 DYRK1A 3' TGTCATGGAGTGGTGACT 83299
                                          CCATC
                    TGTCATGGA GTGGCT
                    ACAGTACCT CACTGA
                       CAC
GAM3682 HNRPDL 3' TGTATGGACCAATACTCTAC 83300 C
                                             TCGTGG
                    TGT ATGGACCA CTAC
                    ACA TACCTGGT GATG
                         TATGA
GAM3682 IL5RA 5' TGTCTATGCTCGTGGCT
                                83301
                                      GACCA
                    TGTC ATG TCGTGGCT
                    ACAG TAC AGCACCGA
                     A G
                                           CCATCG _ _
GAM3682 OPHN1 3' TGTCATGGAATTGTGCATAC 83302
                    TGTCATGGA TG GC TAC
                    ACAGTACCT AC CG ATG
                       TA____ A T
GAM3682 PML
            3' TGCCATGGGCTGCCAGGGCT 83303
                                         ACCA T
                    TGTCATGG TCG GGCT
                    ACGGTACC GGT CCGA
                       CGAC C
GAM3682 DJ473B4 3' TGTCTGGACCACAACC
                                           CGT
                                 83304
                    TGTC TGGACCAT GGCT
                    ACAG ACCTGGTG TTGG
GAM3682 FLJ12484 3' TGTCTGGGCCACAGCTGC 83305 A A C G
                    TGTC TGG CCAT GT GC
                    ACAG ACC GGTG CG CG
                      _{-} C T A
GAM3682 FLJ12899 3' TGCCATGGATCATATGC 83306
                                          CCA _
                    TGTCATGGA TCGTG GC
                    ACGGTACCT AGTAT CG
```

GAM3682 FLJ22477 3' TGTGTGGACCACTCACTGC 83307

TGT TGGACCA TCG GC

CA _ TG

```
ACA ACCTGGT AGT CG
                      C_ G GA
GAM3682 HT002 3' TGTCATGATCATAGCC
                                        GACC
                                 83308
                     TGTCATG ATCGTGGCT
                     ACAGTAC TAGTATCGG
GAM3682 KIAA0323 3' TGCCATGGGCCACATGCT 83309
                                         \mathsf{A}\mathsf{T}\mathsf{G}
                     TGTCATGG CCA CGTG CT
                     ACGGTACC GGT GTAC GA
GAM3682 KIAA0820 3' TGTCATGGGACACCCCTAC 83310
                                            AC GTGG
                     TGTCATGG CATC CTAC
                     ACAGTACC GTGG GATG
                        CT G
GAM3682 KIAA1322 3' TGTCAGGAAATGGCTA
                                  83311
                                         T CCATC
                     TGTCA GGA GTGGCTA
                     ACAGT CCT TACCGAT
                       _ T____
GAM3682 KIAA1671 3' TGTCATGGATTTTCAAAGGC 83312 CCA T
                     TGTCATGGA TCG GGC
                     ACAGTACCT AGT CCG
                        AAA TT
GAM3682 PDE8B 3' TGTAGTGCCTCGTGGCT 83313
                                         CA GA A
                     TGT TG CC TCGTGGCT
                     ACA AC GG AGCACCGA
                      TC __ _
                                         C TC G
GAM3682 TACTILE 5' TGTCATGGAGCAGTTGC 83314
                     TGTCATGGA CA GT GC
                     ACAGTACCT GT CA CG
                        C __ A
GAM3682 TU3A 3' TGTCATGGTAGCAAAGTGGCT 83315
                                            AC_ TC
                     TGTCATGG CA GTGGCT
                     ACAGTACC GT CACCGA
                        ATC TT
GAM3682 LOC114987 3' TGTCATGGTCTATGACT 83316
                                            ACCA _
                     TGTCATGG TC GTGGCT
                     ACAGTACC AG TACTGA
                          _ A
GAM3682 LOC115442 3' TGTCTGGACCATCCCTGAC 83317
                                           Α
                                                _ G
                     TGTC TGGACCAT C TGGC
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1111 11111111 1 1111

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ACAG ACCTGGTA G ACTG
                          GG
                                           СС
GAM3682 LOC120196 3' TGTCATGGAACATGTGACT 83318
                    TGTCATGGA CAT GTGGCT
                    ACAGTACCT GTA CACTGA
                        Τ _
GAM3682 LOC146138 3' TGTCATGATTGGTCCAGCTA 83319
                                           ACCA G
                    TGTCATGG TC TGGCTA
                    ACAGTACT AG GTCGAT
                       AACC
GAM3682 LOC150299 3' TGTCATGGATCTGGATA 83320
                                           CCA G C
                    TGTCATGGA TC TGG TA
                    ACAGTACCT AG ACC AT
                        Т
                                            C C GC
GAM3682 LOC152179 5' TGTCATGGACTACAATGATTA 83321
                    TGTCATGGAC AT GTG TA
                    ACAGTACCTG TG TAC AT
                        A T TA
GAM3682 LOC152582 5' TGCCATGGGCCAGGCC 83322 A TCGT
                    TGTCATGG CCA GGCT
                    ACGGTACC GGT CCGG
                                            A_ GA A
GAM3682 LOC160954 5' GCCGCCGCCGTCGTGGCTAC 83323
                    GTC TG CC TCGTGGCTAC
                    CGG GC GG AGCACCGATG
                     CG C
GAM3682 LOC162048 5' TGTCTGCCCCTCGTGGCT 83324
                                          A GA A
                    TGTC TG CC TCGTGGCT
                    ACAG AC GG AGCACCGA
                      _ GG _
GAM3682 LOC196214 5' TGCCATGGGCCGTCAGGGC 83325 A A T
                    TGTCATGG CC TCG GGC
                    ACGGTACC GG AGT CCG
                       CCC
                                          GACC _
GAM3682 LOC201252 3' TGTCATGACCGTGTGC 83326
                    TGTCATG ATCGTG GC
                    ACAGTAC TGGCAC CG
                            Α
GAM3682 LOC205888 5' TGTGATGAAATTGTGGCTAC 83327
                                          C CC C
                    TGT ATGGA AT GTGGCTAC
```

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ACA TACTT TA CACCGATG
                      C _ A
GAM3682 LOC221814 5' TGACATGGATCAAAAACTA 83328 T C TCGT
                     TG CATGGA CA GGCTA
                     AC GTACCT GT TTGAT
                        A TT
GAM3682 LOC221922 5' TGTCATGGTGCCATTCAT 83329
                     TGTCATGG CCAT CGT
                     ACAGTACC GGTA GTA
                        AC A
GAM3682 LOC222166 3' TGCCATGGACACCACAGGCTAC 83330
                                                 C GT
                     TGTCATGGAC ATC GGCTAC
                     ACGGTACCTG TGG CCGATG
                         TGT
GAM3682 LOC255328 3' TGTCATGGCACTGTCCAAC 83331
                                              CA G
                     TGTCATGG AC TC TGGC
                     ACAGTACC TG AG GTTG
                        G AC _
GAM3682 LOC93444 3' TGCCATGGGTTTCGAAAGCT 83332
                                              ACCA T
                     TGTCATGG TCG GGCT
                     ACGGTACC AGC TCGA
                        CAA TT
GAM3683 CRYZL1 3' TATCAAGAGTAGTGTGACTTTT 83335
                                            TAC TCT
         GC
                      TATCAAG AGT ACTTTTGC
                     ATAGTTC TCA TGAAAACG
                        TCA CAC
GAM3683 DLX4
             3' GTCCACTTCTGCTTTTGC 83336 A G A
                     GT CA TTCT CTTTTGC
                     CA GT AAGA GAAAACG
                      G G C
             3' GTCCACTTCTGCTTTTGC 83336 A G A
GAM3683 DLX4
                     GT CA TTCT CTTTTGC
                     11 11 1111 1111111
                     CA GT AAGA GAAAACG
                      GGC
GAM3683 EHD3
             3' CATTGAGTACAGTGGGGATTTG 83337
                                            CA
                                                 TCTACT
         C
                     TAT AGTACAGT TTTGC
                     |||||
                     GTA TCATGTCA
                                   AAACG
                      AC
                           CCCCT_
GAM3683 HIP2
            3' CATCAAGTATTTACTATTTTTG 83338
                                            CAGTT C
         С
                      TATCAAGTA CTA TTTTGC
```

```
AAAT_ A
GAM3683 MNAT1 3' AAGTCTGCTTTACTTTTGC 83339
                                          ACA C
                     AAGT GTT TACTTTTGC
                     TTCA CGA ATGAAAACG
                      GA A
GAM3683 PIGN
            3' TACCAAGCACTTTCTACTTTTG 83340
                                             AG
                     TATCAAGTAC TTCTACTTTTG
                     ATGGTTCGTG AAGATGAAAAC
GAM3683 KIAA1026 3' GCTGAGTTCCTACTTTTG 83341
                                         AC
                     GT AGTTC TACTTTTG
                     CG TCAAG ATGAAAAC
                      AC G
GAM3683 VIT1
            3' TCAAGTACAGTAAGATTTTGC 83342
                                             TCTAC
                     TCAAGTACAGT TTTTGC
                     AGTTCATGTCA AAAACG
                         TTCT
GAM3684 KIR2DL3 3' TGAGGGAAGGTGGAACA
                                             CG A
                                   83345
                     TGAGGGAAGG TG GAGCG
                     1111111111 11 11111
                     ACTCCCTTCC AC CTTGT
GAM3684 KIR2DL5 3' TGAGGGAAGGTGGAACA 83345
                                             CG A
                     TGAGGGAAGG TG GAGCG
                     ACTCCCTTCC AC CTTGT
                                            CG A
GAM3684 KIR3DL2 3' TGAGGGAAGGTGGAACA 83345
                     TGAGGGAAGG TG GAGCG
                     ACTCCCTTCC AC CTTGT
GAM3684 LENG4 5' TGGGGGAAGGCTGACTGCA 83346 A
                                              G GA
                     TG GGGAAGGC TGA GCG
                     AC CCCTTCCG ACT CGT
                      С
                         _ GA
GAM3684 MYOD1 3' TGGGGGAGGGCGCGAGAA 83347
                                          A A
                     TG GGGA GGCGTGAGAG
                     AC CCCT CCGCGCTCTT
                      C C
GAM3684 NUP98 5' TGGGGAAGGGGAAGTGTCA 83348 A
                                              CGTGA C
                     TG GGGAAGG GAG GTCA
```

GTAGTTCAT GAT AAAACG

```
AC CCCTTCC TTC CAGT
                         CC___ A
GAM3684 FLJ10342 5' TGAGGGAAGGGGTGAAGAGCG 83349
                                               C _
                     TGAGGGAAGG GTGA GAGCG
                     ACTCCCTTCC CACT CTCGC
                         C T
GAM3684 FLJ20886 3' TGAGGGAAGGCGGGACAG 83350
                                               T_ G
                     TGAGGGAAGGCG GA AG
                     ACTCCCTTCCGC CT TC
                         CC G
GAM3684 JM11
            3' TGAGAGAAGAAGCAGGGTGTCA 83351
                                              C G AGC
        G
                     TGAGGGAAGG GT AG GTCAG
                     ACTCTCTTCT CG TC CAGTC
                         T CCA
GAM3684 KIR3DS1 3' TGAGGGAAGGTGGAACA 83345
                                            CG A
                     TGAGGGAAGG TG GAGCG
                     ACTCCCTTCC AC CTTGT
GAM3684 MGC12904 3' TGGGGGAAGGGTGAGAGCTCAG 83352 A
                                                 С
                                                     G
                     TG GGGAAGG GTGAGAGC TCAG
                     AC CCCTTCC CACTCTCG AGTC
GAM3684 LOC219920 3' TGAGGGAAGGCTGGGAG 83353
                                              GA
                     TGAGGGAAGGC TG GAG
                     ACTCCCTTCCG AC CTC
                         С
GAM3684 LOC90317 3' TGGTGGAAGGCAAAGCG 83354
                                          AG
                                               TGA
                     TG GGAAGGCG GAGCG
                     AC CCTTCCGT TTCGC
                     CA
             3' TATAAAATGTAAATAAAAA 83357
GAM3685 PTMA
                                           Τ
                     TATAAAAT GTAAATAAAAAA
                     ATATTTTA CATTTATTTTTT
GAM3685 LOC145123 3' TATAAAATGTAAATAAAAA 83357
                                             Т
                     TATAAAAT GTAAATAAAAA
                     ATATTTTA CATTTATTTTTT
GAM3685 LOC150928 3' TATAAAATGTAAATAAAAA 83357
                                             Т
                     TATAAAAT GTAAATAAAAA
```

ATATTTTA CATTTATTTTT

```
GAM3685 LOC151277 5' AAAACTGCCATAAAAAAAAA 83358
                                             AA
                     AAAATTGT ATAAAAAAACA
                     TTTTGACG TATTTTTTGT
                        G
GAM3685 LOC151507 3' TAAAATTGCAAACAAGAAA 83359
                                                Α
                     TAAAATTGTAAATAA AAA
                     ATTTTAACGTTTGTT TTT
                           С
GAM3686 CD4
            3' CTTGACTGGCTTGGCTGTGA 83362
                                             A AAAACT
         Т
                     CTTGACTG CTT
                                   TGAT
                     GAACTGAC GAA
                                   ACTA
                        C CCGACAC
GAM3686 MAD2L1 3' CACTTTCACTTAAAACTTGAT 83363
                                           GACTG
                     TACTT ACTTAAAACTTGAT
                     GTGAA TGAATTTTGAACTA
                       AG
GAM3686 MTR
            3' CTTGACAATAAAACTTG 83364
                                        TGACT
                     CTTGAC TAAAACTTG
                     GAACTG ATTTTGAAC
                       TT
GAM3686 FLJ20457 3' TACTTGGCTACTTAAAACT 83365
                                           A A
                     TACTTG CTG CTTAAAACT
                     ATGAAC GAT GAATTTTGA
                       С
GAM3686 LOC146446 3' TGCTGACTGGGGAACTTGA 83366 A
                                             TAA
                     TG CTGACT AACTTGA
                     AC GACTGA TTGAACT
                         CCCC
GAM3687 GATA1 3' TATTTTACAAAAGCTTTGAAG 83369
                                           CA_
                     TATTT AAAAGCTTT GAAG
                     ATAAA TTTTCGAAA CTTC
                       ATG
GAM3687 IFI16 3' TTTCAAATTATAGAAGTTG 83370
                                         AAGCTT
                     TTTCAAA TAGAAGTTG
                          AAAGTTT ATCTTCAAC
                        AAT_{-}
GAM3687 LBR
            3' TTTCAATGTAGTTTTAGAAGTT 83371
                                           AA_ C
        G
                     TTTCAA AG TTTAGAAGTTG
```

AAAGTT TC AAATCTTCAAC

ACA A

GAM3687 FLJ21162 3' CATTTCAAGGAAACTGGAAGTT 83372 A TTA

G TATTTCAA AAGCT GAAGTTG

GTAAAGTT TTTGA CTTCAAC

CC C_

GAM3687 KIAA0354 3' TATTTCAAAAATCTCAAGTTG 83373 G TAG

TATTTCAAAAA CTT AAGTTG

ATAAAGTTTTT GAG TTCAAC

Α

GAM3687 TUCAN 5' TATTTCAAAAGAAGT 83374 AAGCTTT

TATTTCAAA AGAAGT

ATAAAGTTT TCTTCA

GAM3687 LOC221935 3' CATTTCAGAAACAGATGAAGTT 83375 AA TTTA

G TATTTCA AAGC GAAGTTG

GTAAAGT TTTG CTTCAAC

C_ TCTA

GAM3687 LOC93550 3' TATTTCAAAAGGTAAAAAGTTG 83376 AGCTTT

TATTTCAAAA AGAAGTTG

ATAAAGTTTT TTTTCAAC

CCAT

GAM3688 ChGn 3' AGATTGTTTGGTTCAC 83379 AGCTA A

GGATTGTTT GG TTCAC

TCTAACAAA CC AAGTG

GAM3688 KIAA0660 3' AGAATTGTTTAAAGATTCA 83380 CTA

AGGATTGTTTAG GGATTCA

TCTTAACAAATT TCTAAGT

GAM3688 KIAA0769 3' AGGGTCCGCTAGGATT 83381 ATT A

AGG GTTT GCTAGGATT

TCC CAGG CGATCCTAA

GAM3688 KIAA1046 3' AGAATTGTTTGAGCCCAG 83382 _ A

AGGATTGTTT AGCT GG

TCTTAACAAA TCGG TC

C G

GAM3688 KIAA1655 3' GGGTTGTAGAATTAGGATT 83383 A TT C

GG TTGT AG TAGGATT

```
CC AACA TT ATCCTAA
                     C TC A
GAM3688 LGI3 3' GGGTGAGCTGGGATTCACG 83384 AT TTT A
                    GG TG AGCT GGATTCACG
                    CC AC TCGA CCTAAGTGC
                     C_ ___ C
GAM3689 KIAA0352 3' TAAATATTAATGTCCAAAA 83387 T
                                           Α
                    A AATATTAATGT CTAAAA
                    A TTATAATTACA GGTTTT
                     Т
GAM3689 KIAA1586 5' TATAATATCAATGCCATAAAA 83388
                                              AC
                    TATAATATTAATGT TAAAA
                    ATATTATAGTTACG ATTTT
                          GT
GAM3690 GAK 3' ATGAATCAGCTGTTCCTTC 83391
                                       TGAAA C
                    ATGAGTCA TGT CCTTC
                    TACTTAGT ACA GGAAG
                       CG___ A
GAM3690 GBA
            3' TGAGCTGACTCTGTCCCTT 83392
                                        CA AA
                    TGAGT TGA TGTCCCTT
                    ACTCG ACT ACAGGGAA
                      __ GAG
GAM3690 GPR17 3' TGGCCTGTGTCTCTCAA 83393 A A AAA C
                    TG GTC TG TGTC CTTCAA
                    AC CGG AC ACAG GAAGTT
                                          _ ATGTCC
GAM3690 IHPK3 3' ATGAGCTCATGAACTCACTCTT 83394
        CAA
                      ATGAG TCATGAA CTTCAA
                    TACTC AGTACTT GAAGTT
                      G GAGTGA
GAM3690 PIWIL1 3' GAGTCTTAAAATGTTTCTT 83395 A
                                            CC
                    GAGTC TGAAATGT CTT
                    CTCAG ATTTTACA GAA
                      Α
                          AΑ
                                             __ TCCC
GAM3690 RNF18 3' ATGATCATGAATAATGATTTTT 83396 G
        CAA
                      ATGA TCATGAA ATG TTCAA
                    TACT AGTACTT TAC AAGTT
                         AT TAAA
GAM3690 C21orf59 3' CATGAAAATGTCTTTTCA 83397
                                         _ CC
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CATGAAA TGTC TTCA

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GTACTTT ACAG AAGT
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T AA

GAM3690 DKFZp547C1763' AGTCATGAAACATTTCA 83398 CCC AGTCATGAAATGT TTCA TCAGTACTTTGTA AAGT GAM3690 FLJ10876 3' ATGAGTCAATGACCTT _ AATGTC 83399 ATGAGTCA TGA CCTT TACTCAGT ACT **GGAA** Т GAM3690 FLJ12998 3' ATGAGAAAATGTCCTTTCAA 83400 TCAT C ATGAG GAAATGTCC TTCAA TACTC TTTTACAGG AAGTT GAM3690 KIAA0125 3' ATGGGTTAGAAATGCCTTCAA 83401 A CAT TC ATG GT GAAATG CCTTCAA TAC CA CTTTAC GGAAGTT C AT_ GAM3690 KIAA0367 3' ATGTGTCATGAAATATTCA 83402 CCCT ATG GTCATGAAATGT TCA TAC CAGTACTTTATA AGT GAM3690 KIAA0892 3' TGGTCATGAAAAGCACTT 83403 A T CC TG GTCATGAAA GT CTT AC CAGTACTTT CG GAA T T_ GAM3690 LOC144144 3' ATGATCATGAATAATGATTTTT 83396 G TCCC CAA ATGA TCATGAA ATG TTCAA TACT AGTACTT TAC AAGTT AT TAAA GAM3690 LOC144453 3' ATAAGTCATGTATGTTTTTCA 83404 AA CCC ATGAGTCATG ATGT TTCA TATTCAGTAC TACA AAGT $A_AA_$ GAM3690 LOC145035 3' ATGAGTCAGAAGTTCCTCA 83405 T ATG CT ATGAGTCA GAA TCC TCA TACTCAGT CTT AGG AGT _ CA_ _ T GAA_ GAM3690 LOC155060 3' TGAGCACCTTGGATGTCCCTTC 83406 AΑ TGAG CAT ATGTCCCTTCAA

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_ GAACC
GAM3690 LOC159089 3' ATGGCCAAGTGTCCCTT 83407 A TGAAA
                    ATG GTCA TGTCCCTT
                    TAC CGGT ACAGGGAA
                     _ TC__
GAM3690 LOC197201 3' ATGAGTCAGGACATGGCTTCA 83408 T A TCC
                    ATGAGTCA GA ATG CTTCA
                    TACTCAGT CT TAC GAAGT
                       CGC
GAM3690 LOC199678 3' TAAGTCATGTCTTTTCA 83409 TGAAA CC
                    TGAGTCA TGTC TTCA
                    ATTCAGT ACAG AAGT
                        AA
GAM3690 LOC220486 3' ATGATCATGAATAATGATTTTT 83396 G __ TCCC
        CAA
                     ATGA TCATGAA ATG TTCAA
                    TACT AGTACTT TAC AAGTT
                     _ AT TAAA
GAM3690 LOC221395 3' AGTGAAAATGTCTCTTC 83410 CAT C
                    AGT GAAATGTC CTTC
                    TCA TTTTACAG GAAG
GAM3690 LOC253461 3' GTCATGAAAGTTTCA 83411 T CCC
                    GTCATGAAA GT TTCA
                    CAGTACTTT CA AAGT
GAM3690 LOC255326 3' ATGAAGTCCTGTCCCTT 83412 ATGAAA
                    ATGA GTC TGTCCCTT
                    TACT CAG ACAGGGAA
                     T G___
GAM3691 ATP11A 3' GTGTGTGCATGTGTGTAT 83415
                                       TAC _
                    GTGT TGT TGTGTGTAT
                    CACA ACG ACACACATA
                     C__ T
GAM3691 CCND1 3' GTGTGTGTGTGTGTGTATC 83416
                                         TAC _
                    GTGT TGT TGTGTGTATC
                    CACA ACA ACACACATAG
                     CAC C
                                       TAC
GAM3691 CDKN1B 3' AGTGTTATTGTGTTGT 83417
                    AGTGT TGTTGTGT GT
```

ACTC GTG TACAGGGAAGTT

TCACA ATAACACA CA

Α A TAC GAM3691 CSF2RB 3' TACGTGTGTGTGTGTGT 83418 TAC GTGT TGT TGTGTGT ATG CACA ACA ACACACA _ C__ C GAM3691 DISC1 3' TACACTGTTACTGAGTAT 83419 G TT TACA TGTTACTG GTGT ATGT ACAATGAC CATA G Т GAM3691 FGFRL1 3' GTGTGTCTGTGTGTGTGT 83420 TA _ GTGT CTGT TGTGTGT CACA GACA ACACACA CA C TAC _ GAM3691 FMR2 3' AGTGTGTGTGTGTGTAT 83421 AGTGT TGT TGTGTGTAT TCACA ACA ACACACATA C__ C GAM3691 GLP1R 3' CAGTGCTGTGTGT TTA 83422 CAGTG CTGTTGTGTGT GTCAC GACGACACACA TA _ GAM3691 LAMP2 3' ATGTCTGTGTGTGTGTAT 83423 GTGT CTGT TGTGTGTAT TACA GACA ACACACATA С TA G T GAM3691 MBNL 3' TACAGTGTGCTGTTTGGT 83424 TACAGTGT CTGTT TG GT ATGTCACA GACAA AC CA C_ _ _ GAM3691 MGMT 3' CAGTGTTACACGTGTGTGT 83425 _ T CAGTGTTAC TGT GTGTGT 11111111 111 111111 GTCACAATG GCA CACACA Τ _ GAM3691 PLAG1 3' GTGTGTGTGTGTGTAT 83426 TAC _ GTGT TGT TGTGTGTAT CACA ACA ACACACATA C__ C

3' AGTGTATGGTGTGTAT 83427

AGTGT TG TGTGTGTAT

TAC T

GAM3691 TIMP3

```
TCACA AC ACACACATA
                       T__ C
GAM3691 XYLB 3' TACAGTTTACTGTTTCATGGT 83428
                                               __ T
                                           G
                     TACAGT TTACTGTT GTG GT
                     ATGTCA AATGACAA TAC CA
                           AG _
GAM3691 DSCR1L1 3' GTGTTATTGTTCTTGTGTGT 83429
                                            C ___
                     GTGTTA TGT TGTGTGT
                     CACAAT ACA ACACACA
                       A AGA
GAM3691 FLJ20048 3' GTGTTACTTGTGTGAGTGTGTG 83430
         Т
                     GTGTTACT GT TGTGTGT
                     CACAATGA CA ACACACA
                        A CACTC
GAM3691 HH114 3' GTGTGTGTGTGTGTGTATC 83416
                                           TAC _
                     GTGT TGT TGTGTGTATC
                     CACA ACA ACACACATAG
                      CAC C
GAM3691 HRASLS2 5' GTGTTGCTGACTCTGTGT 83431
                                           A _ G
                     GTGTT CTG TT TGTGT
                     CACAA GAC GA ACACA
                       CTG
GAM3691 HRIHFB2122 3' GTGTGTGTGTGTGTGTATC 83416
                                              TAC
                     GTGT TGT TGTGTGTATC
                     CACA ACA ACACACATAG
                      CAC C
GAM3691 HSPC039 3' TACAGTGTAATTGTGATTGT 83432
                                             TACT
                     TACAGTGT GTTGTG TGT
                     ATGTCACA TAACAC ACA
                        T____
                             TΑ
GAM3691 KIAA0222 3' GTGTTTGTGTGTGTGTGT 83433
                                           AC _
                     GTGTT TGT TGTGTGT
                     CACAA ACA ACACACA
                       AC C
GAM3691 KIAA0337 3' CAGTGTGCGTACGTGTGT 83434
                                            ___ T T
                     CAGTGT TAC GT GTGTGT
                     GTCACA ATG CA CACACA
                       CGC _ _
GAM3691 KIAA0544 3' GTGTGTGTGTGTGTGTAT 83435
                                           TAC _
                     GTGT TGT TGTGTGTAT
```

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CAC C
GAM3691 MGC27434 3' CAGTCTTGCTGCACGTAT 83436 G TAC TG
                    CAGT T TGTTG TGTAT
                    GTCA A ACGAC GCATA
                      G ___ GT
GAM3691 OSBPL11 3' TGAGTTCTCATTGTTGTGTGTA 83437 C G_ C
        TC
                     A AGT TTA TGTTGTGTGTATC
                    A TCA AGT ACAACACACATAG
                     C AG A
GAM3691 OSBPL9 3' GTGTGTGTGTGTGTGTATC 83438
                                          TAC _
                    GTGT TGT TGTGTGTATC
                    CACA ACA ACACACATAG
                      C C
                               83439 G C T
GAM3691 P66 3' CAGTTCATGTGTGT
                    CAGT TTA TGT GTGTGT
                    GTCA AGT ACA CACACA
GAM3691 RPH3A 3' GTGTGTACATGTGTGTGT 83440
                                         _ _ T
                    GTGT TAC TGT GTGTGT
                    CACA ATG ACA CACACA
                      C T _
GAM3691 LOC112868 3' TACAGTGTTATTTTTTGCTAT 83441
                                             С
                    TACAGTGTTA TGTTGT
                    ATGTCACAAT ACGATA
                        AAAAA
GAM3691 LOC126917 3' GTGTGTGTGTGTGTGTAT 83435
                                           TAC _
                    GTGT TGT TGTGTGTAT
                    CACA ACA ACACACATA
                      CAC C
GAM3691 LOC130535 3' TACAGTGTTTTGTT 83442
                                           AC G
                    TACAGTGTT TGTT TGT
                    ATGTCACAA ACAA ACA
                        A_ A
GAM3691 LOC132321 3' TACAGGTTGTTGCATGTAT 83443
                                           T TAC
                    TACAG GT TGTTGTGTAT
                    ATGTC CA ACAACGTACATA
GAM3691 LOC148394 3' TACAGTGTGGCTGTGGCCAGTA 83444
                                              TA T GT
```

TACAGTGT CTGT GT GTAT

Т

CACA ACA ACACACATA

```
ATGTCACA GACA CG CATA
                        CC C GT
GAM3691 LOC150112 3' AGTGTGCGTGTGTGTGT 83445
                                           TAC
                    AGTGT TGT TGTGTGT
                    TCACA ACA ACACACA
                       CGC C
GAM3691 LOC151196 3' GTGTGTGTGTGTGTGTGTATC 83416
                                            TAC _
                    GTGT TGT TGTGTGTATC
                     CACA ACA ACACACATAG
                      CAC C
GAM3691 LOC163479 5' TACAGTGATACTGTTGCTGAGT 83446
                                             Т
                                                  GT
                    TACAGTG TACTGTTGT GT
                    ATGTCAC ATGACAACG CA
                       Т
                            ACT
GAM3691 LOC219988 3' GTGTGTGTGTGTGTATC 83447
                                          TAC T
                    GTGT TGT GTGTGTATC
                    CACA ACA CACACATAG
                      C__ _
GAM3691 LOC222008 3' GTGTGTGTGTGTGTGTAT 83435
                                            TAC
                    GTGT TGT TGTGTGTAT
                     CACA ACA ACACACATA
                      CAC C
GAM3691 LOC253982 3' GTGTGTGTGTGTAT 83448
                                         TAC T
                    GTGT TGT GTGTGTAT
                     CACA ACA CACACATA
GAM3691 LOC254196 3' TACAGTGTGGCTGTGGCCAGTA 83444 TA T GT
        Т
                     TACAGTGT CTGT GT GTAT
                     ATGTCACA GACA CG CATA
                        CC C GT
GAM3691 LOC92148 5' GTGTTGCTGACTCTGTGT 83431
                                          A _ G
                     GTGTT CTG TT TGTGT
                     CACAA GAC GA ACACA
                       CTG
GAM3692 AHCY 3' AGCTGTTCCAAGACCACT 83451
                                        CG G C
                    AGC GTTC AGG GCCACT
                     TCG CAAG TTC TGGTGA
                      A_ G _
GAM3692 KIAA1493 3' TGAGCTGAGATCGCGCCACT 83452 C C _
                    C GGTT GAG GCGCCACT
```

1 1111 111 11111111

```
C _ TAG
            3' TGGGGGGTGGGGAAGGAAAGC 83455 A AA A T
GAM3693 CIT
                     TG GG TG GGAA GAGAGT
                     11 11 11 1111 111111
                     AC CC AC CCTT CTTTCG
                      CCCCC
GAM3693 RASGRP2 5' TGGGGAGCGAGGAATGAAA 83456 A A
                     TG GGA TGAGGAATGAGA
                     AC CCT GCTCCTTACTTT
                      CC
GAM3693 SLC6A1 3' AGGTCGGGGGGTGAGAGTGTC 83457
                                              AA A AA
                     AGG TG GG TGAGAGTGTC
                     TCC GC CC ACTCTCACAG
                       A C CC
GAM3693 SLC6A6 3' TGGGGAGTGGGGAGATGAG 83458 A A A
                     TG GGA TG GGA ATGAG
                     AC CCT AC CCT TACTC
                      C
GAM3693 ABLIM 5' TGAGAAATGGGGAGTG
                                            A AATGA
                                   83459
                     TGAGGAATG GG GAGTG
                     ACTCTTTAC CC CTCAC
GAM3693 DOK4
             3' TGGGGAGGAGGAATGGGAAGGT 83460 A AT
                                                    A T
         С
                      TG GGA GAGGAATG GAG GTC
                     AC CCT CTCCTTAC CTT CAG
                      C C_{-}
                              CC
GAM3693 FLJ10846 3' TGAGGAATAGGGATATAACTGT 83461
                                                AAAG
                     TGAGGAATG GGA TG GA TGT
                     ACTCCTTAT CCT AT TT ACA
                         C _ A G
GAM3693 FLJ13188 3' GAGGAATGGGGAATGGGA 83462
                                                 Α
                     GAGGAATG GGAATG GA
                      11111111 111111 11
                      CTCCTTAC CCTTAC CT
                            С
GAM3693 GAPCENA 3' TGAGGAGTGATTTCTAGAGTGT 83463
                                                A GGAATG
         C
                      TGAGGA TGA AGAGTGTC
                      ACTCCT ACT
                                 TCTCACAG
                        C AAAGA_
GAM3693 KIAA0090 3' AGGAATCTCTGAGAGTGTC 83464
                                             GAGGAA
                     AGGAAT TGAGAGTGTC
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A TCGA CTC CGCGGTGA

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TCCTTA
                           ACTCTCACAG
                       GAG
GAM3693 KIAA1321 3' GAGGAGTGGGGGAAAATGT 83465
                                           A A AAT
                    GAGGA TG GG GAGAGTGT
                    CTCCT AC CC CTTTTACA
                      C CC
GAM3693 KIAA1464 3' GAGGAATGGGGGAGATGT 83466
                                           A AAT G
                    GAGGAATG GG GAGA TGT
                    CTCCTTAC CC CTCT ACA
                       _ C__ _
GAM3693 MGC3178 3' GAGGTGGGTGAAGAGTGT 83467
                                          AA A AAT
                    GAGG TG GG GAGAGTGT
                    CTCC AC CC TTCTCACA
                      __ _ AC_
GAM3693 RBBP4 3' TGGGGAAAGAGGAACGTGT 83468 A T
                                               GAGA
                    TG GGAA GAGGAAT GTGT
                    AC CCTT CTCCTTG CACA
                     СТ
GAM3693 LOC144512 5' AGGAATGAGGTATGGGTGT 83469
                                           A AGA
                    AGGAATGAGG ATG GTGT
                    TCCTTACTCC TAC CACA
                        A C
GAM3693 LOC149863 5' TGGGGGAGAGACATGT 83470 A AAT
                                                 GAGA
                    TG GG GAGGAAT GTGT
                    AC CC CTCCTTG TACA
                     _ CCT
GAM3693 LOC150350 5' TGAGGGAGAGAGAGAGTGT 83471 AAT GA G
                    TGAGG GAG AT AGAGTGT
                    ACTCC CTC TG TCTCACA
                      CT_ TC _
GAM3693 LOC222182 3' TGAGAGTGGGATGGGAGTGT 83472
                                            AA A A A
                    TGAGG TG GGA TG GAGTGT
                    ACTCT AC CCT AC CTCACA
                      C_ _ C
GAM3693 LOC254143 5' AGGAATGAGGTATGGGTGT 83469
                                             A AGA
                    AGGAATGAGG ATG GTGT
                    TCCTTACTCC TAC CACA
                        A C__
GAM3693 LOC254428 3' GAGGGATGGGGAAAATGT 83473
                                          A A AAT
                    GAGG ATG GG GAGAGTGT
```

```
CTCC TAC CC CTTTTACA
```

C _ ___

GAM3693 LOC91397 5' TGAGGAAGGGGAGAAAATGTC 83474 TGA AT

TGAGGAA GGA GAGAGTGTC

ACTCCTT CCT CTTTTACAG

CC_ __

GAM3694 ACLY 3' TAAAAAAAAAAAAAGAGAGACA 83477

TAAAAAAAGAAAAA AGGCATT

AAA

ATTTTTTTTTTT TCTGTAA

CTC

GAM3694 AK3 3' AAAAAAAGAAAAAAAAA 83478

TT

AAAAAAAGAAAAAAAAG

TTTTTTTCTTTTTTTTT

GAM3694 BCL11A 3' AAAAAGAAAAAAAAACAGG 83479

AAAAAGAAAAAAA AGG

TTTTTCTTTTTTT TCC

G

GAM3694 CANX 3' AAAAAAGAACCAAGAAAAGGC 83480 AAA_

AAAAAGAA AAAAGGC

TTTTTCTT TTTTCCG

GGTTC

GAM3694 CARPX 3' AAACAAGAAAAGAAAGGCATT 83481 A AA

AAA AAGAAAA AAAGGCATT

TTT TTCTTTT TTTCCGTAA

G C_

GAM3694 CENTD1 3' TAAAAAAAGAAAAAAAA 83482

TAAAAAAGAAAAAAAA

GAM3694 CENTD1 3' TAAAAAAAGAAAAAAA 83482

TAAAAAAGAAAAAAAA

GAM3694 CNP 3' TAAAAAAAAAAAAAAAAAAA 83483

TAAAAAAGAAAAAAAAGG

ATTTTTTTTTTTTTTTT

GAM3694 CTNNB1 3' TAAAAAAAAAAAAAAAAAAA 83483

TAAAAAAAGAAAAAAAAGG

ATTTTTTTTTTTTTTTTT

Α TAAAAAAGAAAAAA AGGCA ATTTTTTCTTTTTTT TTTGT G GAM3694 DPYSL2 3' AAAAAGAAAAGAAAAGGCA 83485 AAAAAGAAAA AAAAAGGCA TTTTTCTTTT TTTTTCCGT C GAM3694 ERBB2IP 5' AAAAAAAGAAAAAAAAA 83478 AAAAAAAAAAAAAAA TTTTTTTCTTTTTTTTT AAAAGAAAAAAAAGGCAT TTTTTTTTTTTTTTGTA GAM3694 G6PC 3' CAAAAAAAAAAAAAAA 83487 TAAAAAAAAAAAAAAA **GTTTTTTTTTTTT** GAM3694 GFRA1 5' AAAAAAAGAAAAAAAAA 83478 AAAAAAAAAAAAAAA TTTTTTTCTTTTTTTTT GAM3694 GLS С 3' AAAAAGAAAAAAAAGGAATT 83488 AAAAAGAAAAAAAAAGG ATT TTTTTCTTTTTTTTCC TAA Т GAM3694 GLUD1 3' AAAAAAAAAAAAAAAGC 83489 AAAAAAAAAAAAAGGC TTTTTTTTTTTTTCG GAM3694 GNAO1 3' TGAAAAAAAAAAAAAGG 83490 A A AAAAGAAAAAAAAGG 1 1111111111111111 A TTTTTTTTTTTCC C GAM3694 HIS1 5' AAAAAGAAAAAAAAAAA 83491 G AAAAAGAAAAAAAA CA

TTTTTCTTTTTTTTT GT

AA AAAGAAAAAAAAGGC TT TTTTTTTTTTTCG C GAM3694 JAM3 3' AAAAAAAAAAAATAGCAT 83493 Α AAAGAAAAAAA GGCAT TTTTTTTTTTT TCGTA GAM3694 JRKL 3' AAAAAAAAAAAAAAAAA 83494 AAAAAAAAAAAAAAGGC TTTTTTTTTTTTTTTTG GAM3694 LY95 5' TAAAAAAAAAAAAAAAAAA 83495 TAAAAAAGAAAAAAAAGG **ATTTTTTTTTTTTTTC** GAM3694 MAK 3' AAAAAAAAAAAAAAAAGC 83496 AAAAAAGAAAAAAAAGGC TTTTTTTTTTTTTCG GAM3694 MTP 3' CAAAAAAGAGAAAAAAATGG 83497 Α TAAAAAAGA AAAAAAA GG GTTTTTTTCT TTTTTTT CC С Α GAM3694 NFRKB 5' AAAAGAAAAGAAGGCAT 83498 AA AAAAGAAAA AAGGCAT TTTTCTTTTT TTCCGTA C_{-} GAM3694 NPEPPS 3' AAAAAAAGAAAAAAAAGG 83499 AAAAAAGAAAAAAA GG TTTTTTTCTTTTTTTT CC GAM3694 NRXN3 5' TAAAGAAAGAAAAAAAAAA 83500 Α TAAA AAAGAAAAAAAAGG ATTT TTTCTTTTTTTC С GAM3694 OPHN1 3' AAAAAAAGAAAAAAAAA 83478 AAAAAAAAAAAAAAA

TTTTTTTCTTTTTTTTT

GAM3694 OPHN1 3' AAAAAAAGAAAAAAAAAGG 83501 AAAAAAAAAAAAAAAGG TTTTTTTCTTTTTTTTCC GAM3694 OSR1 3' CAAAAAAGAAAAGAAAAGC 83502 Α TAAAAAAAGAAAA AAAGGC GTTTTTTTCTTTTT TTTTCG C GAM3694 PCDH15 3' TAAAAACGAGAAAAAAAACTGC 83503 AG Α ATT TAAAAA AGAAAAAAA GCATT ATTTTT TCTTTTTTT CGTAA GC GA GAM3694 PIAS1 3' TAAAAAAAGGAAAAAAAAACAC 83504 G TAAAAAAG AAAAAAA GC ATTTTTTC TTTTTTT TG С G GAM3694 PIGR 3' AAAAAAAGAAAAAGAAAAAC 83505 Α AAAAAAGAAAA AAAGGC TTTTTTTCTTTTT TTTTTG GAM3694 PKP2 3' AAAAAAGTCCAGGAAAGGCATT 83506 AAAAA AAAAAAG **AAAGGCATT** TTTTTTC **TTTCCGTAA AGGTCC** G GAM3694 PKP4 3' AAAAAGGAAAAAAAAAAACACACT 83507 AAAAA GAAAAAAAAA GCATT TTTTT CTTTTTTTT TGTGA C G GAM3694 PPARGC1 3' AAAAAAGAAAAAATCCACATT 83508 AAG AAAAAAGAAAAAA GCATT TTTTTTCTTTTTT TGTAA **AGG** GAM3694 PRKR 5' AAAAGAGAAAAAAGAAGGC 83509 Α Α AAAA AGAAAAAA AAGGC TTTT TCTTTTTT TTCCG C C GAM3694 PTMA 3' CAAAAAAGGAAAAAAAAA 83510 Α TAAAAA GAAAAAAAAG

| GTTTTT CTTTTTTTC | |
|--|---|
| C GAM3694 PTP4A2 5' AAAAAAAAAAAAAAAGCCA 83511 AAAAGAAAAAAAAAG CA | G |
| | |
| TTTTTTTTTTTC GT | |
| G | |
| GAM3694 PTP4A2 5' AAAAAAAAAAAAAAGCCA 83511 | G |
| AAAAGAAAAAAAG CA | |
| | |
| TTTTTTTTTTC GT | |
| G GAM3694 RAD21 3' TGAAGAAGGAAAAAGGCA 83512 A A | A |
| A AAGAA AAAAAGGCA | A |
| | |
| A TTCTT TTTTTCCGT | |
| C CC | |
| GAM3694 SCAMP1 3' AAAAAAAGAAAAGAAAAAGA 83513 | _ |
| AAAAAAGAAAA AAAAAGG | |
| | |
| TTTTTTCTTTTTTTCT | |
| C GAM3694 SDC1 3' AAAAAAAAAAAAAAAAAAAA 83514 | |
| AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA | |
| | |
| TTTTTTTTTTTTC | |
| | |
| GAM3694 SDC4 3' TAAAAAAAAAAAAAAAAAAA 83483 | |
| TAAAAAAGAAAAAAAAGG | |
| | |
| ATTTTTTTTTTTTTTTT | |
| GAM3694 SEPP1 3' AAAAAGAAAAAAAAAGACAT 83515 | |
| AAAAGAAAAAAAGGCAT | |
| | |
| TTTTTCTTTTTTTCTGTA | |
| | |
| GAM3694 SEPP1 3' AAAAAGAAAAAAAAAGACAT 83515 | |
| AAAAGAAAAAAAAGGCAT | |
| | |
| TITTOTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT | |
| GAM3694 SGCB 3' AAAAAAAAAAAAAAAGGAATT 83516 | С |
| AAAAGAAAAAAAGG ATT | |
| | |
| TTTTTTTTTTTCC TAA | |
| T | |
| GAM3694 SLC15A1 3' AAAAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA | |
| TT AAAAAGAAAAA AAA GGCATT | |

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TTTTTCTTTTTT TCGTAA
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C TA

AAGAAAAAAAAGGCATT

TTTTTTTTTTTCGTAG

GAM3694 SOX12 3' TAAAAAAAAAAAAAAAAAAAA 83483

TAAAAAAGAAAAAAAAGG

GAM3694 SOX9 3' AAAAAAGGGATGGACAAAAAGG 83519 AAAA____

CATT

AAAAAAG

TTTTTC TTTTTCCGTAA

AAAAAGGCATT

CCTACCTG

GAM3694 SRC 3' AAAAAAAAAAAAAGGACA 83520

AAAGAAAAAAAAGG CA

TTTTTTTTTTTCC GT

Т

GAM3694 SVIL 3' AAAAAAAAAAAAAAAGGCATT 83521

AAAAAAAAAAAAAGGCATT

TTTTTTTTTTTTTCCGTAA

GAM3694 SVIL 3' AAAAAAAAAAAAAAAGGCATT 83521

AAAAAAAAAAAAAGGCATT

TTTTTTTTTTTTCCGTAA

GAM3694 TAPBP 3' AAAGAAAAAAAAAAAGGCATT 83522 A

AAA AAGAAAAAAAAAGGCATT

TTT TTTTTTTTTTCCGTAA

C

GAM3694 TBX3 5' AAAAAAGAAAGGAGGC 83523 AAAA

AAAAAGAAAA AGGC

TTTTTTCTTTT TCCG

CC_

GAM3694 TBX3 5' AAAAAAGAAAAGGAGGC 83523

AAAAAAGAAAA AGGC

AAAA

TTTTTTCTTTT TCCG

 CC_{-}

GAM3694 TGFBR2 5' TGAAAAAAAAAAAAAAAGCACT 83524 A

A AAAGAAAAAAAAGGCATT

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GAM3694 TNFRSF11A 3' CAAAAAAAGAAAAAAAAA 83525
                    TAAAAAAGAAAAAAAAG
                    GTTTTTTTCTTTTTTTTT
GAM3694 TNFSF9 3' AAAGAAAGAAAGAAAAAGC 83526
                                        Α
                                             Α
                    AAA AAAGAAA AAAAAGGC
                    TTT TTTCTTT TTTTTTCG
                     С
                         C
GAM3694 TOMM22 3' AAAAAAAAAAAAAAAAAAA 83527
                    AAAAAAAAAAAAAGGCA
                    TTTTTTTTTTTTTTTTTGT
GAM3694 TPI1
           5' TAAAAAAAAAAAAAAAAA 83528
                    TAAAAAAGAAAAAAAAGGC
                    ATTTTTTTTTTTTTTTTG
GAM3694 UBL3
            3' AAAAGAAAAGTGGCAT
                                         AAAA
                                83529
                    AAAAGAAAAA GGCAT
                    TTTTCTTTTT CCGTA
                        CA
GAM3694 UMPK
             3' AAAAAGAAAAAAAAAATCAAAG 83530
                                                    Ш
                       AGAAAAAAA AGGCATT A
        GCATTA
                    TCCGTAA T
                    TCTTTTTTTT
                        TTAGTT
                                Ш
GAM3694 XKRY
            5' AAAGAAAAAAAAAAA 83531
                    AAA AAAGAAAAAAAAGG
                    TTT TTTCTTTTTTTTCT
                     C
GAM3694 XKRY
             5' AAAGAAAGAAAAAAAAA 83531
                    AAA AAAGAAAAAAAAGG
                    TTT TTTCTTTTTTTTCT
GAM3694 ZHX1
            3' AAAAGAAAAAAAAAGC 83532
                    AAAAGAAAAAAAAG GC
                    TTTTCTTTTTTTTT CG
                          Т
GAM3694 ZIC1
            5' AAAAAAAAAAAAAAAA 83514
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AAAAAAAAAAAAAAAGG

A TTTTTTTTTTTTCGTGA

TTTTTTTTTTTTTC GAM3694 ZNF74 5' AAAAAAAAAAAAAAAAAAA 83533 AAAAAAAAAAAAAAGG TTTTTTTTTTTTTTTCT GAM3694 ACTR2 3' AAAGGAAAAAAGAAAGCATT 83534 Α Α AAA GAAAAAA AAGGCATT TTT CTTTTTT TTTCGTAA С С GAM3694 ADAMDEC1 3' AAAAAAGAAAAAAAAAA 83535 AAAAAAAAAAAAAAGG TTTTTTCTTTTTTTTC GAM3694 ALY 3' AAAAAAAGAAAAAAAAA 83536 AAAAAAGAAAAAAAAGG TTTTTTTCTTTTTTTTTTT GAM3694 AP1S2 3' AAAAAAAAAAAAAAAAAGG 83537 AAAAAAGAAAAAAAAGG TTTTTTTTTTTTCC GAM3694 APMCF1 3' TAAAAAAAAAAAAAAAAAAAAA 83483 TAAAAAAGAAAAAAAAGG ATTTTTTTTTTTTTTTTTT GAM3694 ATP9B 3' CAAAAAAAGAAAGAAAAGC 83538 AAA TAAAAAAGAAA AAAGGC GTTTTTTTCTTT TTTTCG C__ GAM3694 B3GALT1 3' AAAAAAAGAAAAAAAAA 83478

AAAAAAGAAAAAAAAG

ATTTTTTTTTTT TCC

GAM3694 C20orf177 3' AAAAAAGAAAAAAAAAAACCAT 83540 G AAAAAAAAAAAAAA CAT TTTTTTCTTTTTTTTT GTA G GAM3694 C6orf5 3' AAAAAAAGAAAAAAAAA 83478 AAAAAAGAAAAAAAAG TTTTTTTCTTTTTTTTT GAM3694 CCR6 5' AAGAAAAAGAGAGGCATT 83541 AAA AAGAAAAA AGGCATT TTCTTTTT TCCGTAA CTC GAM3694 CDW92 3' AAAAGAAACCAAGGCAT 83542 **AAAA** AAAAGAAA AAGGCAT TTTTCTTT TTCCGTA GG GAM3694 CUL2 3' AAAAAAAAAAAAAAAGACAC 83543 AAAAAAAAAAAAAGGCAT TTTTTTTTTTTTTTCTGTG CATT AAAAAAAAAAA AAAGGCATT TTTTTTTCTTTTTT TTTTTGTAA CTT GAM3694 DCOHM 3' AAAAAAAGAAAGGAGGCA 83545 AAAAA AAAAAAGAAA AGGCA 11111 TTTTTTTCTTT TCCGT CC GAM3694 DKFZP434D146 3' TAAAAAAAGAAAAAAAAAAGGCA 83546 TAAAAAAAAAAAAAAAGGCA ATTTTTTCTTTTTTTTCCGT GAM3694 DKFZP564D166 3' AAAAAAAAAAAAAAAAAAGG 83547 AAAAAAAAAAAAAAGG 1111111111111111111 TTTTTTTTTTTTTTCC

TTTTTTTTTTTTT GTAA

GA GAM3694 EDIL3 3' TGAAAAAAAAAAAAAAACCATT 83549 A G A AAAAGAAAAAAAAG CATT A TTTTTTTTTTTT GTAA C G GAM3694 ESDN 3' TAAAAAAAAAAAAAAAAA 83483 TAAAAAAGAAAAAAAGG ATTTTTTTTTTTTTTTTTTTTT GAM3694 FKBP5 3' AAAAAGACAAAAAAAGC 83550 AA AAAAAGA AAAAAAGGC TTTTTCT TTTTTTCG G GAM3694 FKBP9 3' AAAAAAAGAAAGGAAAAGC 83551 AAA AAAAAAGAAA AAAGGC TTTTTTCTTT TTTTCG CC_{-} GAM3694 FLJ10535 3' AAAAAAAGAAAAAAAAA 83536 AAAAAAAAAAAAAAAGG TTTTTTTCTTTTTTTTTTT GAM3694 FLJ10546 3' AAAAAAAGAAAAAAAAAGC 83552 AA AAAAAAAAAAA GGC TTTTTTTCTTTTTT TCG GAM3694 FLJ10697 3' AAAAAAAAAAAAAAAAAAGG 83547 AAAAAAAAAAAAAAAGG TTTTTTTTTTTTTTCC GAM3694 FLJ10697 3' TAAAAACACTAAAAAAGGCATT 83553 **AAGAAA** TAAAAA AAAAAAGGCATT ШШ ATTTTT TTTTTTCCGTAA GTGA С TTTTTTTCTTTTTTTTTC TA GAM3694 FLJ12619 3' TAAAAGGAGAAAAAAAAAAA 83555 AA

TAAAA AGAAAAAAAAAGGC

ATTTT TCTTTTTTTTTG CC GAM3694 FLJ12649 3' AAAAAGAAAAAGAAAAGCATT 83556 AAAAAGAAAA AAAAGGCATT TTTTTCTTTTT TTTTTCGTAA C GAM3694 FLJ13385 3' TAAAAACAAGAAAAAAAAAAA 83557 C TAAAAA AAGAAAAAAAAAG GC ATTTTT TTCTTTTTTTTT CG G Τ GAM3694 FLJ14146 3' AAAAAAAGAAAAAAAAA 83558 AAAAAAAAAAAAAAA TTTTTTTCTTTTTTTTC GAM3694 FLJ14431 5' AAAAAAAGAAAAAAAA 83558 AAAAAAGAAAAAAAAG TTTTTTTCTTTTTTTTC GAM3694 FLJ14564 3' TAAAAAAAAAAAAAAAAAAA 83483 TAAAAAAGAAAAAAAAGG ATTTTTTTTTTTTTTTTTT GAM3694 FLJ14621 3' AAAAAAAGAAAAACACTGCATT 83559 **AAAAG** AAAAAAAGAAAAA GCATT TTTTTTTCTTTTT CGTAA GTGA GAM3694 FLJ20060 3' AAAGAAGGCTAAAAGGCATT 83560 AAA AAAGAA AAAAGGCATT TTTCTT TTTTCCGTAA CCGA GAM3694 FLJ20527 3' AAAAAAGAAAAAAAAAAACCA 83561 G AAAAAAGAAAAAAAAG CA TTTTTTCTTTTTTTTT GT G GAM3694 FLJ20984 3' TAAAAAAAGAAAAGAAAG 83562 Α TAAAAAAGAAAAA AAAG ATTTTTTTCTTTTT TTTC C GAM3694 FLJ21032 3' AAAAAAGACAAAGAAGGGCATT 83563 A A A

AAAAAAGA AAA AA GGCATT

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TTTTTTCT TTT TT CCGTAA
                       GCC
GAM3694 FLJ21324 5' AAAAAAAGAAAAGAAAAGC 83564
                                             Α
                    AAAAAAAGAAAA AAAGGC
                    TTTTTTTCTTTTT TTTTCG
                         C
GAM3694 FLJ21657 3' TGAAAGAAAAGGAAAAAGCA 83565 A
                    A AAAGAAAA AAAAGGCA
                    A TTTCTTTTT TTTTTCGT
                     С
                         CC
GAM3694 FLJ22313 3' AAAAAAAAAAAAAAAAAAA 83494
                    AAAAAAAAAAAAAAGGC
                    TTTTTTTTTTTTTTTTG
GAM3694 FLJ22944 3' AAAAAAGAAATGAGGCATT 83566
                                            AAAAA
                    AAAAAAGAAA AGGCATT
                    TTTTTTCTTT
                              TCCGTAA
                        AC
GAM3694 FLJ23132 3' AAAAAAAAAAAAAAAAAAAA 83527
                    AAAAAGAAAAAAAAGGCA
                    GAM3694 FLJ23518 3' AAGAAAAGGAAAAAAGCATT 83567
                    AAGAAAA AAAAAGGCATT
                    TTCTTTT TTTTTTCGTAA
                       CC
GAM3694 HGRG8 3' AAAAAGACAAAAAACATAGCAT 83568
                                               AA
        Т
                     AAAAAAA GGCATT
                    TTTTTCT TTTTTT TCGTAA
                       G
                          GTA
GAM3694 HIP-55 3' AAAAAGAAAAAGGCA
                                         AAA
                                83569
                    AAAAAGAAAAA AGGCA
                    TTTTTCTTTTT TCCGT
GAM3694 HNRPU 3' AAAAAAAAAAAAAAGTCAC 83570
                                             G
                    AAAAGAAAAAAAAG CAT
                    TTTTTTTTTTTTC GTG
GAM3694 HNRPU 3' AAAAAAAAAAAAAAGTCAC 83570
                                             G
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AAAAGAAAAAAAAG CAT

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TTTTTTTTTTTC GTG
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Α

Т

TTTTTTTTTTTCC TG

GAM3694 HTR3A 3' AAGAAAAAAAGACACT 83572 A AAGAAAAAAA GGCATT

TTCTTTTTTT CTGTGA

TTTTTTTTTTTTTTTG

GAM3694 KIAA0217 3' AAAGAAAAATTTGAGGCATT 83574 AAA_

AAAGAAAA AGGCATT

11111111 1111111

TTTCTTTTT TCCGTAA

AAAC

GAM3694 KIAA0261 3' TAAAAAAGGAAAAAAAAAA 83575 A

TAAAAA GAAAAAAAAGG

ATTTTTT CTTTTTTTTC

С

GAM3694 KIAA0318 3' TGAAAGAAAAAAAAAAA 83576 A

A AAAGAAAAAAAAGGC

A TTTCTTTTTTTTTG

 \Box

GAM3694 KIAA0349 3' AAAAAAAGAAAAAAAAA 83536

AAAAAAAAAAAAAAAGG

TTTTTTTCTTTTTTTTTT

GAM3694 KIAA0561 3' AAAAAAAGAAAAAAAA 83558

AAAAAAAAAAAAAAAA

TTTTTTTCTTTTTTTC

GAM3694 KIAA0828 3' AAAAGAAAGAAGAAGGCA 83577 _ A

AAAAGAAA AAA AAGGCA

TTTTCTTT TTT TTCCGT

CC

GAM3694 KIAA0907 3' AAAAAAAGAAAAAAAA 83558

AAAAAAAAAAAAAAA

TTTTTTTCTTTTTTTTC

GAM3694 KIAA0971 3' AAAGAAAGAAAAAAAAAAAAGACA 83578 TT AAA AAAGAAAAAAAAAGG CATT TTT TTTCTTTTTTTTC GTAA C Т GAM3694 KIAA1155 3' AAAAAAAGAAAAAAAAA 83478 AAAAAAGAAAAAAAAG TTTTTTTCTTTTTTTTT GAM3694 KIAA1238 3' AAAAAAAAAAAAAAAAAAAGCA 83579 AAAAAAAAAAAAAGGCA TTTTTTTTTTTTTCGT GAM3694 KIAA1265 3' TGAAAAAAAAAAAAACAGCATT 83580 A Α A AAAGAAAAAAA GGCATT A TTTTTTTTTTT TCGTAA C G GAM3694 KIAA1332 3' AAAAAAAGAAAAGAAAAAAGG 83581 AAAAAAGAAAA AAAAAGG TTTTTTCTTTT TTTTTCC CT GAM3694 KIAA1391 3' TGAAAAAAAAAAAAAAAGGCA 83582 A A AAAAGAAAAAAAAGGCA A TTTTTTTTTTTTCCGT GAM3694 KIAA1557 3' AAAAAAAGAAAAAAAAA 83478 AAAAAAAAAAAAAAA TTTTTTTCTTTTTTTTT GAM3694 KIAA1627 3' AAAAAAAGAAGAAAAAAGC 83583 AA AAAAAAGAA AAAAAGGC TTTTTTCTT TTTTTTCG C_{-} GAM3694 KIAA1634 3' TGAAAAAAAAAAAAAAGGC 83584 A A AAAGAAAAAAAAGGC 1 1111111111111111 A TTTTTTTTTTTTCCG С GAM3694 KIAA1701 3' TAAAAAAAAAAAAAAAAAAA 83483 TAAAAAAGAAAAAAAAGG

ATTTTTTTTTTTTTTTTT

GAM3694 KIAA1804 3' AAAAAAGAAAAAAAAGG 83585 Α AAAAAAGAAAAAAA GG TTTTTTCTTTTTTT CC GAM3694 KIAA1877 3' AAAAAAAGAAAAGAAAAGA 83586 Α AAAAAAGAAAA AAAAGG TTTTTTTCTTTT TTTTCT C GAM3694 KIAA1962 3' AAAAAAAGAAAAAAAAA 83478 AAAAAAAAAAAAAAA TTTTTTTCTTTTTTTTT GAM3694 KIAA1972 3' AAAAGAAGAAAAAAAAAATGTGC 83587 G ATT AAAA AAGAAAAAAAA GCATT TTTT TTCTTTTTTTT CGTAA С ACA 3' AAAGAGGAAAAAAAGCACT 83588 GAM3694 LIPG AA AAAGA AAAAAAGGCATT TTTCT TTTTTTTCGTGA CC GAM3694 LSFR2 3' TAAAATAAGAAAAAAAAAGGC 83589 Α TAAAA AAGAAAAAAAAAGGC ATTTT TTCTTTTTTTCCG GAM3694 MGC20460 5' TAAAAAAAGACAAAAAAAAAAA 83590 С TAAAAAAAAAAAAAAGGC ATTTTTTCT TTTTTTTCG GT GAM3694 MGC2714 3' TAAAAAAAGGAAAAAAAA 83591 Α TAAAAAAG AAAAAAAG ATTTTTTC TTTTTTTC GAM3694 NEK1 3' AAAGAGAAATAAAGGCAT 83592 A A AAAGA AAA AAAGGCAT TTTCT TTT TTTCCGTA C A GAM3694 NIBAN 3' AAAGAGAAAAAAAAAAGC 83593 Α AAA AGAAAAAAAAAGGC

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TTT TCTTTTTTTTTCG
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C

TTTTTTTTTTTTTTTG

GAM3694 NTT73 5' AAAAAAAAAAAAAAAAAA 83494

AAAAAAAAAAAAAAGGC

TTTTTTTTTTTTTTTTG

GAM3694 OATPRP4 3' AAAGAAAGAAAGAAGGCAC 83594 A AAA

AAA AAAGAAAA AAGGCAT

TTT TTTCTTTT TTCCGTG

C C

GAM3694 pcnp 3' TGAAAAAGAAAAAAAA 83595 A

A AAAAAGAAAAAAAAG

A TTTTTCTTTTTTTC

С

GAM3694 PDCD4 3' AAAAAAAAAAAAAAAAAAA 83596

AAAAAAAAAAAAAAAGGC

GAM3694 PDE7B 5' AAAAAAAGAAAAAAAAGG 83499

AAAAAAAAAAAA GG

TTTTTTTCTTTTTTTT CC

GAM3694 PELI2 3' TGAAAAAAAAAAAAAAAAAAGACAT 83597 A

T A

A AAAAAGAAAAAAAAGGCATT

Α

A TTTTTTTTTTTTTTTCTGTAA

С

GAM3694 PIP3-E 3' TAAAAAAAGAAAAAAAAAA 83598

TAAAAAAGAAAAAAAGG

ATTTTTTTCTTTTTTTTC

GAM3694 POLR2D 3' AAAAAAAAAAAAAAAAAAGCATT 83599

AAAAAAAAAAAAAAGGCATT

TTTTTTTTTTTTTCGTAA

GAM3694 PPIB 3' TAAAAAAAAAAAAAAACCCACA 83600 AAG

TT TAAAAAAAGAAAAAA GCATT

ATTTTTTTTTTTT TGTAA

GGG

GAM3694 PRO0641 5' AAAAAAAAAAAAAAAAAAGCAC 83601

AAAAGAAAAAAAAGGCAT

TTTTTTTTTTTTCGTG

TAAAAAAGAAAAAAAAGG

ATTTTTTTTTTTTTTTTTT

GAM3694 PSPH 3' AAAAAAAAAAAAAAAAAAGCA 83603

AAAAGAAAAAAAAGGCA

TTTTTTTTTTTTTCGT

GAM3694 PTPRT 3' TGAAAAGAAAAAAAAAAAACATT 83604 A G

A AAAAGAAAAAAAAG CATT

A TTTTCTTTTTTTT GTAA

С

GAM3694 RAP140 3' AAAAAAAAAAAAAAAAAAA 83494

AAAAAAGAAAAAAAAGGC

TTTTTTTTTTTTTTTTG

GAM3694 RAP2B 3' AAAAAAAAAAAAAAAAACCATT 83605 G

AAAAAAAAAAAAA CATT

TTTTTTTTTTTTTT GTAA

G

GAM3694 RGS13 5' TAAAATGAGAAGAGAAAAGGCA 83606 AA AAA

TAAAA AGAA AAAAGGCA

ATTTT TCTT TTTTCCGT

AC CTC

AAAAAGAAAAAAA GCA

TTTTTTTTTTTT TGT

CT

GAM3694 RRS1 3' AAAAAGAAAAAAAAAGGC 83608

AAAAAAAAAAAAAGGC

TTTTTCTTTTTTTTCCG

GAM3694 SAMHD1 3' AAAAAAGAAAAAAAATAGA 83609

AAAAAGAAAAAAA AGG

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TTTTTTCTTTTTTT TCT
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Α

GAM3694 SCAND2 3' AAAAAAAAAAAAAAGGCATT 83610
AAAGAAAAAAAAAAGGCATT

TTTTTTTTTTTCCGTAA

GAM3694 SDFR1 3' AAAGGAAAAAAAAAAGCA 83611 A

AAA GAAAAAAAAAGGCA

TTT CTTTTTTTTTCGT

С

GAM3694 SDFR1 3' AAAGGAAAAAAAAAAAAA 83611 A

AAA GAAAAAAAAAGGCA

TTT CTTTTTTTTTCGT

С

AAAAAAGAAAAAA AGGC

Α

Α

TTTTTTTTTTTTT TTCG

С

GAM3694 SSR3 3' AAAAAAAGAGAAAAAAAA 83613

AAAAAAAGA AAAAAAAGG

TTTTTTTCT TTTTTTTCT

С

TAAAAAAAAAAAAAAAGG

ATTTTTTTTTTTTTCC

GAM3694 TAO1 3' AAAAAAAAAAAAAAAAAA 83533

AAAAAAGAAAAAAAAGG

TTTTTTTTTTTTTTTTCT

GAM3694 TGIF2 3' AAAAAAAAAAAAAAAAAA 83536

AAAAAAAGAAAAAAAAGG

TTTTTTTCTTTTTTTTTT

GAM3694 TOM1L1 3' AAAAAGAGAAAAAAAGGC 83615 A

AAAAAGA AAAAAAAGGC

TTTTTCT TTTTTTCCG

С

GAM3694 TRAP150 3' TAAAAAAAAAAAAAAAA 83616

TAAAAAAGAAAAAAAAG

GAM3694 USP15 3' AAAAAAAGAAAAAAAA 83478 AAAAAAAGAAAAAAAAAA

TTTTTTTCTTTTTTTTT

AAAAAGAAAAAAAAGGCAT

TTTTTTTTTTTTTTCTGTA

GAM3694 WSB1 3' AAAAAAAAAAAAAAAAAGACAT 83617

AAAAAAAAAAAAAGGCAT

TTTTTTTTTTTTTCTGTA

GAM3694 ZFP106 3' TAAAAAAAGAAGGCA 83618 AAAAAAA

TAAAAAAAA AGGCA

ATTTTTTCT TCCGT

GAM3694 LOC115297 3' AAAAAAGGAAAAGGGAGGCACT 83619 A AAA

AAAAAAG AAAA AGGCATT

TTTTTTC TTTT TCCGTGA

C CCC

GAM3694 LOC122553 3' AAAAAAAGAAAAAAAAA 83478

AAAAAAAAAAAAAAA

TTTTTTTCTTTTTTTTT

GAM3694 LOC133686 3' AAAAAAAAAAAAAAAAAAA 83620

AAAAAAAAAAAAAAAGG

TTTTTTTTTTTTTTTTCT

GAM3694 LOC139673 3' AAAAAAAAAAAAAAAAAAAAAGG 83537

AAAAAAAAAAAAAAAGG

TTTTTTTTTTTTCC

AAAAAGAAAAAAAAGGC

TTTTTTTTTTTTTTCG

GAM3694 LOC144524 5' TAAAAAAAGAAAAAAAAA 83616

TAAAAAAAAAAAAAAA

GAM3694 LOC144587 5' TGAAAAAAAAAAAAAAGG 83490 A A AAAAGAAAAAAAAGG A TTTTTTTTTTTCC GAM3694 LOC147632 5' AGAAAAAAAAAGGACCAT 83621 AGAAAAAAAAGG CAT TCTTTTTTTTCC GTA TG AAAAAAAAAAAAAAAGG TTTTTTTTTTTTTTTTTT GAM3694 LOC148137 3' TGAAAAAAAAAAAAAAAGAGC 83622 A A AAAGAAAAAAAAG GC A TTTTTTTTTTTC CG C Т GAM3694 LOC148198 3' AAAAAAGAAAAAGAAAAAC 83623 Α AAAAAGAAAA AAAGGC TTTTTTCTTTTT TTTTTG GAM3694 LOC148898 5' TGAAGAAAAAAAAAGCAC 83624 A G A AAGAAAAAAAAG CAT A TTCTTTTTTTC GTG С GAM3694 LOC149722 5' TAAGAAAAGGAAATAAAAGGCA 83625 A A Т TAA AAAAG AAA AAAAGGCAT ATT TTTTC TTT TTTTCCGTA CCA GAM3694 LOC151766 3' AAAAAAAAAAAAAAAAAAA 83603 AAAAGAAAAAAAAGGCA TTTTTTTTTTTTTCGT GAM3694 LOC153683 3' AAAAAAAAAAAAAAAAAA 83626 AAAAAAAAAAAAAAA TTTTTTTTTTTTTTC GAM3694 LOC154141 5' TAAAAAAATTTCCTAAAAGGCA 83627 **GAAAAA** TT TAAAAAA **AAAAGGCATT**

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ATTTTTT TTTTCCGTAA
                        AAAGGA
GAM3694 LOC202559 3' AAAAAGAAAAAAAAAAAAGATT 83628
                                                 C
                     AAAAAGAAAAAAAAGG ATT
                     TTTTTCTTTTTTTTC TAA
GAM3694 LOC203286 5' AAAAAGAAAGGAAAGGCATT 83629
                                               AAA
                     AAAAAGAAA AAAGGCATT
                     TTTTTCTTT TTTCCGTAA
                         CC
GAM3694 LOC205327 3' AAAAAAAAAAAAAAAAGCCATT 83630
                                                 G
                     AAAAAGAAAAAAAAG CATT
                     TTTTTTTTTTTTC GTAA
                           G
GAM3694 LOC221078 5' CAAAAAAAGAAAAAATGC 83631
                                                AAG
                     TAAAAAAGAAAAAA GC
                     GTTTTTTTCTTTTTT CG
                           A___
GAM3694 LOC221178 3' AAAAAGAGAGAAAGGCAT 83632
                                             AAAAA
                     AAAAAGA AAAGGCAT
                     TTTTTCT TTTCCGTA
                        CTC
GAM3694 LOC222001 3' AAAGAAGGCTAAAAGGCATT 83560
                                             AAA
                     AAAGAA AAAAGGCATT
                     TTTCTT TTTTCCGTAA
                       CCGA
GAM3694 LOC253981 3' AAAAAAAGAAAAGAAAAG 83633
                     AAAAAAAAAAA AAAGG
                     TTTTTTTCTTTTT TTTTC
                          C
GAM3694 LOC51107 3' AAAAAAGAAAAAAAGGCA 83634
                                              AA
                     AAAAAAGAAAAA AGGCA
                     TTTTTTCTTTTTT TCCGT
GAM3694 LOC51580 3' AAAAAAGAAAAGAAAAGG 83635
                                              Α
                     AAAAAGAAAA AAAAGG
                     TTTTTTCTTTT TTTTCC
                         С
GAM3694 LOC51696 3' TAAAAAAAAAAAAAAAAAAA 83495
                     TAAAAAAAGAAAAAAAAGG
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ATTTTTTTTTTTTTC

AAAAAAGAAAAAAAAGGCA GAM3694 LOC90371 5' AAAAAAAGAAAAAAAAA 83558 AAAAAAGAAAAAAAAG TTTTTTTCTTTTTTTTC GAM3694 LOC90957 3' AAAAGAAAAAAAAAAAAGGC 83637 AAAA AGAAAAAAAAAGGC TTTT TTTTTTTTTCCG GAM3694 LOC91097 3' AAAAAAAGAAAAGAAAAGC 83564 AAAAAAAGAAAA AAAGGC TTTTTTCTTTTT TTTTCG С GAM3694 LOC91380 3' AAAAAAGAAAAAAAAGCA 83638 AA AAAAAAGAAAAAA GGCA TTTTTTCTTTTTT TCGT GAM3694 LOC91408 3' CAAAAGGAGGAAAAAAAGGCA 83639 AA AA TT TAAAA AGA AAAAAAGGCATT GTTTT TCT TTTTTTCCGTAA CC CC 3' AATATTAAAATACAGTGATAGT 83642 GAM3695 SPP1 TT AATATTAAAATATA ATAGTTT TTATAATTTTATGT TATCAAA CAC GAM3695 CCNG2 3' TAACATTAAAATAATACCATAG 83643 TΑ TTT TAATATTAAAATA TATAGTTT ATTGTAATTTTAT GTATCAAA **TATG** GAM3695 LOC121441 3' TAATATAAAAATATACATATTT 83644 Т G Т TAATAT AAAATATATATA TTT ATTATA TTTTATATGTAT AAA Τ Α GAM3696 DKFZP564D172 3' TTTCCTCCTATATAGTTG 83647 G_{-} TTTCCT TGTGTAGTTG

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AAAGGA ATATATCAAC
                       GG
                                              T TA
GAM3696 KIAA1634 3' GCATCTTTCCTGATGACGTC 83648
                     GCATCTTTCCTG GTG GTT
                     CGTAGAAAGGAC TAC CAG
                          _ TG
GAM3696 PRO1598 3' ATCTTTCCCACTGTGGTTG 83649
                                            TGG A
                     ATCTTTCC T TGT GTTG
                     TAGAAAGG G ACA CAAC
                        GT C
GAM3696 LOC151643 3' GCATTTTTTTCCTTGTAGTTG 83650
                                                 GTG
                                            С
                     GCAT TTTCCT TGTAGTTG
                     CGTA AAAGGA ACATCAAC
                       AAA
GAM3697 GPR34 3' CTGAGTTTTGTAAATGCTAG 83653
                     CTGA TTGTAAAT CTAG
                     GACT AACATTTA GATC
                       CAA
                             С
GAM3697 LAMP2 3' TAAAGACTGATCTCAAAATGCT 83654 T
                                               GT A
                     A AAGACTGATT AAAT CT
                     A TTCTGACTAG TTTA GA
                          AGT C
GAM3697 DIS3
            3' TAAGTATGTAAATACTA 83655
                                       ACTGAT
                     TAAG TGTAAATACTA
                     ATTC ACATTTATGAT
                       ΑT
GAM3697 HABP4 3' TATAAGTGCTTAATAAATACTA 83656
                                            A GATT
        G
                      TATAAG CT GTAAATACTAG
                     ATATTC GA TATTTATGATC
                       AC AT
GAM3697 PNMA5 5' GACTGATCTAATACTAG 83657
                                           GTA
                     GACTGATT AATACTAG
                     11111111 11111111
                     CTGACTAG TTATGATC
                        Α___
```

|||||||| || ||||||||| AACTGTAA TT CTTTCATAA CT_ TC GAM3698 AASDHPPT 3' TTAATGTTAGTAACAGAAA 83661 CA

GAM3698 CHD2

Т

TTGA TTAGTAACAGAAA

3' TTGACATTGAAAAGGAAAGTAT 83660

TTGACATT AA GAAAGTATT

AGT CA

AATT AATCATTGTCTTT

AC

| GAM3698 | CHUK 3' TTGACA | CTAATACATAGAAGGT 83662 AC_ A | |
|--|--------------------|--|--|
| | ATT | TTGACATTAGTA AGAA GTATT | |
| | | | |
| | | AACTGTGATTAT TCTT CATAA | |
| | | GTA C | |
| GAM3698 | DKFZp434G179 3' T | FAATATTAGTAAAGTTTTAGA 83663 C III | |
| | AAGTATTA | TTAGTAA AGAAAGTATT A | |
| | | | |
| | | AATCATT TCTTTCATAA T | |
| | | TCAAAA III | |
| GAM3698 | DKFZp564I1922 3' T | TAATAAGACAGAAAGTAT 83664 | |
| | | TTAGTA ACAGAAAGTAT | |
| | | | |
| | | AATTAT TGTCTTTCATA | |
| | | TC | |
| GAM3698 LOC133418 3' TTAGCAAAGGCAGAAAGTATT 83665 | | | |
| | | TTAGTAA CAGAAAGTATT | |
| | | | |
| | | AATCGTT GTCTTTCATAA | |
| | | TCC | |
| GAM3698 | LOC255098 3' TTAG | CAAAGGCAGAAAGTATT 83665 | |
| | | TTAGTAA CAGAAAGTATT | |
| | | | |
| | | AATCGTT GTCTTTCATAA | |
| | | TCC | |
| GAM3699 | PIN 3' CAGTCTC | TGGTATTTGGAATT 83668 GA AA_ | |
| | | TAG TT TATTTGGAATT | |
| | | | |
| | | GTC AG ATAAACCTTAA | |
| 0.4440000 | MOTDOOL SI TAAOT | AG ACC | |
| GAM3699 | MSTP031 5 TAAGT | AGGATTATTGGA 83669 ATAT | |
| | | TAAGTAGGATTA TTGGA | |
| | | | |
| | | ATTCATCCTAAT AACCT | |
| GAM3699 NESHBP 3' TAAGTAGAGATTTATGGAATT 83670 AATATT | | | |
| GAIVI3699 | NESHBP 3 TAAGT | AGAGATTTATGGAATT 83670 _ AATATT TAAGTAG GATT TGGAATT | |
| | | | |
| | | ATTCATC CTAA ACCTTAA | |
| | | T AT | |
| CAMSEGO | LOC90784 5' GTAG | GAACTTTGGAATT 83671 TTAATA | |
| CAMMOOSS | 10030704 3 GTAG | GTAGGA TTTGGAATT | |
| | | | |
| | | CATCCT AAACCTTAA | |
| | | TG | |
| GAM3699 LOC92360 3' GTAGGGTATCACATTGGAATT 83672 ATAT | | | |
| | | GTAGG ATTA TTGGAATT | |
| | | | |
| | | 11111 1111 11111111 | |

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CATCC TAGT AACCTTAA
                       CA GT
GAM3700 CLOCK 3' AAATGTATGTAACTTGTAT 83675
                                            CTTA
                     AAGTGTATGT TGTAT
                     TTTACATACA ACATA
                         TTGA
GAM3700 GPR85 3' TAAAGTGTGATGTTTATAT 83676
                                           С
                     TAAAGTGT ATGT TTATGT
                     ATTTCACA TACA AATATA
                        С
GAM3700 HTR2C 3' TAAAGTGTATATTTACTGT 83677
                                             CTTA
                     TAAAGTGTATGT TGT
                     ATTTCACATATA ACA
                          AATG
GAM3700 SWAP70 3' AAAGTGTATGTTCTGGTAT 83678
                                              TAT
                     AAAGTGTATGT CT GTAT
                     TTTCACATACA GA CATA
                         A C__
GAM3700 TCF3
             3' CAAAGTGTATGTTTTGT
                                           CTTA
                                 83679
                     TAAAGTGTATGT TGT
                     GTTTCACATACA ACA
                          AA
GAM3700 TIMM17A 3' AAGTATTATTTTATGTATATT 83680
                                            A C
                     AAGTGT TGT TTATGTATATT
                     TTCATA ATA AATACATATAA
GAM3700 FLJ10989 3' AGTGTATGTTACTTGTGTAT 83681
                                              _ A
                     AGTGTATGT CTT TGTAT
                     TCACATACA GAA ACATA
                        AT C
GAM3700 FLJ11196 3' GCGTACCGATTTATGTATATT 83682
                                             _ TC
                     GTGTAT G TTATGTATATT
                     CGCATG C AATACATATAA
                       G TA
GAM3700 KCNH7 3' AAAGTTCTTATGTATAT 83683
                                         GTATG
                     AAAGT TCTTATGTATAT
                     TTTCA AGAATACATATA
                                               TA_
GAM3700 KIAA1789 5' AAAGTGTGTGTCTAACACTGT 83684
                     AAAGTGT TGTCT TGT
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TTTCACA ACAGA ACA
                         C TTGTG
GAM3700 MYOZ2 3' TGAATGTATTTATATGTATATT 83685 A
                                                GTCT
                      A AGTGTAT TATGTATATT
                      A TTACATA ATACATATAA
                       C
                           AAT
GAM3700 ZNF237 3' GTGTACGTTTGTATATT 83686
                                             CTTA
                      GTGTATGT TGTATATT
                      11111111 11111111
                      CACATGCA ACATATAA
GAM3700 LOC158722 3' TAAAGTGTTTATTGTATGT 83687
                                               A CT
                      TAAAGTGT TGT TATGT
                      ATTTCACA ATA ATACA
                          A AC
GAM3701 CD2AP 3' ATGCATTATGGAAAAAGTAGT 83690
                                                AA TCGT
                      ATGCATTAT GA GTAGT
                      TACGTAATA CT CATCA
                          C_ TTTT
GAM3701 FREB
             3' TGCATTATAGGATGTTTAG 83691
                                              ACG
                      TGCATTATA GAT GT TAG
                      111111111 111 11 111
                      ACGTAATAT CTA CA ATC
                          \mathsf{C}_{-}\mathsf{A}
GAM3701 PPIL1 3' GCATTATGGTTCATGTGTAGTA 83692
                                               AAGATC
                       GCATTAT
                                 GTGTAGTAA
         Α
                      CACATCATT
                      CGTAATA
                         CCAAGTA
GAM3701 SGCG
              3' TGCATTTTGAGATCATGTAG 83693
                                              ATA
                      TGCATT AGATCGTGTAG
                      ACGTAA TCTAGTACATC
                         AAC
GAM3701 TBR1
             3' TGCATTAGGGCACATAGTAA 83694
                                              ATA AT TG
                      TGCATT AG CG TAGTAA
                      ACGTAA TC GT ATCATT
                         __ CC GT
GAM3701 H-plk
           3' ATGAATTATCTTATGTGTAGTA 83695
                                            C AAG C
                       ATG ATTAT AT GTGTAGTAA
         Α
```

TAC TAATA TA CACATCATT

ATGCATTA AAGA CGT AGTAA

T T GT

T GAA _

3' ATGCATTAAAGACATTAAGTAA 83696

GAM3701 HRH4

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TACGTAAT TTCT GTA TCATT
                        _ _ AT
GAM3701 KIAA1724 3' ATGCATTAAAAGATCTGTCTAG 83697
                                             T G
                     ATGCATTA AAGATC GT TAG
                     TACGTAAT TTCTAG CA ATC
                        Т
                          A G
GAM3701 LOC133584 3' TGCATTATAAGAAGTAG 83698
                                              TCGT
                     TGCATTATAAGA GTAG
                     ACGTAATATTCT CATC
                          Т
GAM3701 LOC147610 5' ATTATGAAACAATGTAGTAA 83699
                                            A C
                     ATTAT AGAT GTGTAGTAA
                     TAATA TTTG TACATCATT
                       C T
GAM3701 LOC203339 3' ATACATTATAAGGTCACTCTAG 83700
                                                A G
                     ATGCATTATAAG TCGT TAG
                     TATGTAATATTC AGTG ATC
                          C AG
GAM3701 LOC55885 3' TGCATTATAGTGATTTCAGTA 83701
                                              A CGTG
                     TGCATTATA GAT TAGTA
                     ACGTAATAT CTA GTCAT
                        CA AA
GAM3702 APPL
             3' TTAGTTATTTGCCTTTGTGGAT 83704
                                                     Ш
                      TAGTTGTT GT TGGATAT A
         ATA
                     ATCAATAA CG ACCTATA T
                        A GAAAC
                                  Ш
                                            G TG
GAM3702 CDKN2B 3' TCAGTTGTTCCAATGATAT 83705
                     TTAGTTGTT TA GATAT
                     AGTCAACAA GT CTATA
                        G TA
GAM3702 EHD3
             3' TAGTCTGAATATGGATAT 83706
                                         GTT
                     TAGTT GTATGGATAT
                     ATCAG TATACCTATA
                       ACT
GAM3702 EHHADH 3' TAGTCCATTGTATGGATAT 83707
                                          TG
                     TAG T TTGTATGGATAT
                     ATC G AACATACCTATA
                      A GT
GAM3702 NQO1
             3' TCAGCTATTGTGGATAT
                                  83708
                                            AΤ
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TTAGTTGTTGT GGATAT

AGTCGATAACA CCTATA

GAM3702 BCoR 3' TTAGTTGTTGTGTGGGATAT 83709 TTAGTTGTT TGGATAT AATCAACAACA ACCTATA CAC TG__ GAM3702 BIRC1 3' TCAGTTGTACAACATGGAT 83710 TTAGTTGT TATGGAT AGTCAACA GTACCTA **TGTT** GAM3702 FLJ10283 3' CTAGTTGCTTATATGGAT 83711 TTAGTTGTT GTATGGAT **GATCAACGA TATACCTA** Α GAM3702 KIAA0831 3' TAGTTGTTACATAGGATAT 83712 TAGTTGTTGTAT GGATAT ATCAACAATGTA CCTATA Т GAM3702 KIAA1765 3' TTATTCATTGTGTGGATAT 83713 GTG A TTA T TTGT TGGATAT AAT A AACA ACCTATA AGT C GAM3702 LANO 3' GTGGTTGTATATCTGGATAT 83714 T GT GTTGTA TGGATAT CA CAACAT ACCTATA С ATAG GAM3702 LMOD1 3' TTAGCTGTGTGATCATGGATAT 83715 TG TTAGTTGT TATGGATAT AATCGACA GTACCTATA CACTA GAM3702 MYT1L 5' TCAGTGAGTATGGATAT 83716 T TT TTAGT G GTATGGATAT AGTCA C CATACCTATA _ T_ GAM3702 PPP1R14C 3' TTAGTTGTGTGTAGATAT 83717 TA TTAGTTGT GT TGGATAT AATCAACA CA ATCTATA _ C GAM3702 LOC221479 3' TAGTTGTTGTGAAGACAT 83718 ΑT TAGTTGTTGT GGATAT

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ATCAACAACA TCTGTA
                       CT
GAM3702 LOC92900 5' TCACCTGTGTATGGATAT 83719
                                       G T
                   TTA TTGT GTATGGATAT
                   AGT GACA CATACCTATA
                    G _
GAM3703 ATP5B 3' AAACGTAGTAGCAGGGG
                                83722
                                       CAATC GA
                   AAACGTAG GCA GGGG
                   TTTGCATC CGT CCCC
                      AT
GAM3703 CYP2F1 3' ACGTAGCAACCCGCATGGGC 83723
                                           GAG
                   ACGTAGCAATC GCA GGGC
                   TGCATCGTTGG CGT CCCG
                       G A
GAM3703 DGAT2 3' GTGGCAATAAAGGGGC
                                83724 A CGC
                   GT GCAAT AGAGGGGC
                   CA CGTTA TTTCCCCG
                    С
GAM3703 IFNAR2 3' ACGATAGCATCAGAGGGGC 83725
                                          ATCG
                   ACG TAGCA CAGAGGGGC
                   TGC ATCGT GTCTCCCCG
                    T A
GAM3703 LIMK1 3' AAAACGCAGAGGACAGAGGGGC 83726
                                           CAATC
                   AAAACGTAG GCAGAGGGC
                   TTTTGCGTC
                             TGTCTCCCCG
                       TCC
GAM3703 LIMK1 3' AAAACGCAGAGGACAGAGGGGC 83726
                                           CAATC
                   AAAACGTAG GCAGAGGGGC
                   TTTTGCGTC
                            TGTCTCCCCG
                       TCC
GAM3703 USF2
            3' AAAACGCAGCTGGGGGAGGGGC 83727
                                            AATCGCA
                   AAAACGTAGC
                               GAGGGGC
                    TTTTGCGTCG
                               CTCCCCG
                       ACCCC_
GAM3703 AFAP
            3' CATAGGCACAGAGGGC
                               83728
                                       CAAT
                   CGTAG CGCAGAGGGGC
```

GTATC GTGTCTCCCCG

AAC TAG GCAGAGGGC

G CAATC

 $\mathsf{C}_{\scriptscriptstyle{-}}$

GAM3703 ARHGEF4 3' AACTAGAGGGCAGAGGGGC 83729

```
_ TCC__
GAM3703 BAG3 5' ACGTGGCCAGAGAGGGG 83730 A AAT C
                   ACGT GC CG AGAGGGG
                   TGCA CG GT TCTCCCC
                    C C
GAM3703 DKFZp762E1511 3' GCATGCTGGGCAGAGGGGC 83731 _ AATC
                   GTA GC GCAGAGGGC
                   CGT CG CGTCTCCCCG
                    A ACC
GAM3703 FLJ13848 3' GTGCAGGCAGAGGGGC 83732 A ATC
                   GT GCA GCAGAGGGC
                   CA CGT CGTCTCCCCG
                    С
GAM3703 FLJ20489 3' AAACGCAGGGCTGGAGGGGC 83733 CAATC A
                   AAACGTAG GC GAGGGGC
                   TTTGCGTC CG CTCCCCG
                      C____ AC
GAM3703 KIAA1808 3' GGAACGCAGCGCATGGAGGGGC 83734 A AATC
                   A AACGTAGC GCA GAGGGGC
                   C TTGCGTCG CGT CTCCCCG
                       ____ AC
GAM3703 SCAMP5 3' ACATAGGCAGAGGGG 83735
                                      CAATC
                   ACGTAG GCAGAGGG
                   TGTATC CGTCTCCCC
GAM3703 TTYH2 3' GGAACGAGGACAGAGGGG 83736 A T CAATC
                   A AACG AG GCAGAGGGG
                   C TTGC TC TGTCTCCCC
                   C _ C___
GAM3703 LOC144596 3' AAAACGCAGCTGGGGGAGGGGC 83727 AATCGCA
                   AAAACGTAGC GAGGGGC
                   TTTTGCGTCG CTCCCCG
                       ACCCC_
GAM3703 LOC200310 3' AACATGGCTCAGAGGGG 83737 A AATCG
                   AACGT GC CAGAGGG
                   TTGTA CG GTCTCCCC
                     C A__
GAM3703 LOC221929 5' GTGAGCTGCAGAGGGGC 83738 _ AATC
                   GT AGC GCAGAGGGC
```

TTG ATC CGTCTCCCCG

```
CATCG CGTCTCCCCG
                      C A___
GAM3703 LOC91526 5' GCAGCATGCAGAGGGG 83739
                                           ATC
                     GTAGCA GCAGAGGG
                     CGTCGT CGTCTCCCC
                       A__
GAM3703 LOC92223 5' AACGTAGCAGCTGGGG
                                    83740
                                            ATC AGA
                     AACGTAGCA GC GGGG
                     TTGCATCGT CG CCCC
                           Α
GAM3704 ARHGEF7 3' TGGTTTGATCGTCTCCATT 83743
                                             Α
                     TGGTTTGA CGTCTCCATT
                     ACCAAACT GCAGAGGTAA
GAM3704 ETV5 3' TGGTTTGAGCCTCCCCAAC 83744
                                           AC
                     TGGTTTGA GTCTCC TTAAC
                     ACCAAACT CGGAGG GGTTG
GAM3704 STMN1 3' TGGCTTGATTTATTAACC 83745
                                           ACGTCTCC
                     TGGTTTGA
                                ATTAACC
                     ACCGAACT
                               TAATTGG
                        AAA
GAM3704 TDRD1 3' GGTTTCACTCCATTA
                                        GAA T
                                83746
                     GGTTT CG CTCCATTA
                     CCAAA GT GAGGTAAT
GAM3704 FHR5 3' TGGTTTGAATGTGTCCCC 83747
                                           С
                     TGGTTTGAA GTCTCC
                     ACCAAACTT CAGGGG
                        ACA
GAM3704 PRO1770 5' TGGTTTAAATGTACTATAACCC 83748
                                              C _ CCAT
                     TGGTTTGAA GT CT TAACCC
                     ACCAAATTT CA GA ATTGGG
                         \mathsf{A}\mathsf{T}\mathsf{T}
GAM3704 LOC122726 3' TGGTTTGATGTTCCCATAACCC 83749
                                               AC CT T
                     TGGTTTGA GT CCAT AACCC
                     ACCAAACT CA GGTA TTGGG
                        A_ AG _
GAM3704 LOC158427 3' TGATTATCATTCTTTATTAACC 83750
                                             TGAACG CC
         С
                     TGGTT TCT ATTAACCC
```

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TAGTA_ AA
GAM3705 RPS6KA1 3' TGTGTGAGGCAAGTACTATTAG 83753
                                             AG ATGT
        GG
                      TGTGTGA AAGTG TTAGGG
                     ACACACT TTCAT AATCCC
                       CCG GAT
GAM3705 B3GALT1 5' TGTGTGAGGAGGAGATTCAAGG 83754
                                              AATT
                    TGTGTGA GA G GA GTTTAGGG
                     ACACACT CT C CT TAAGTTCC
GAM3705 BAT8
            3' TGTGTGAAAGGGTGGTGGG 83755
                                           AA A TTTA
                    TGTGTGAAG GTG TG GG
                     ACACACTTT CAC AC CC
                        CC C _
GAM3705 FLJ13114 3' TGTGAGGGGCTGTTTAGG 83756
                                         A AA GA
                    TGTGA G GT TGTTTAGG
                    ACACT C CG ACAAATCC
                      _ CC __
GAM3705 FLJ22655 3' TGTGTGAAGGAGAGTGAGCAGG 83757
                                              A T TT
                     TGTGTGAAG AGTGA GT AGGG
        G
                     ACACACTTC TCACT CG TCCC
                        CTC
GAM3705 HNRPA0 3' TGTGTGAGGGGTGGGGCTTAG 83758
                                              AGAA AT
                     TGTGTGA GTG GTTTAGG
        G
                     ACACACT CAC CGAATCC
                       CCCC CC
GAM3705 SCYB11 3' ATGTGCTACATGATGTTTGGGG 83759
                                            AAGAA
                    GTGTG GTGATGTTT GGG
                     TACAC TACTACAAA CCC
                       GATG
                               С
GAM3705 LOC201304 3' TGTTTGAGGAAGTGGGTTGGG 83760
                                            G A AT TA
                     TGT TGA GAAGTG GTT GGG
                     ACA ACT CTTCAC CAA CCC
                      A C C_ _
                                            GA _
GAM3705 LOC256158 5' TGAACCAGGTGATGTTTGGGG 83761
                                                   Α
                    TGAA AG TGATGTTT GGG
                     ACTT TC ACTACAAA CCC
                      GG C
                             С
GAM3705 LOC91050 3' TGTTGAAGGAGTGAAG
                                  83762
                                         G A TGTTT
                    TGT TGAAG AGTGA AG
```

ACTAA AGA TAATTGGG

```
ACA ACTTC TCACT TC
                        С
GAM3706 C7orf2 3' GCTTTTAAGGAAATAAGAAAC 83765 ACTC TT
                     GCT AAG AGTAAGAAAC
                     CGA TTC TTATTCTTTG
                      AAA CT
GAM3706 MLH3 3' GCTACTCAACTAGGGGAA 83766
                                           G TAA
                     GCTACTCAA TTAG GAA
                     CGATGAGTT GATC CTT
                        CC
GAM3706 NPPB 3' CTCAAAGGTAAGAAAC 83767
                                        TTA
                     CTCAAG GTAAGAAAC
                     GAGTTT CATTCTTTG
GAM3706 DKFZp434E2220 5' ACTCAAGTCTAACAGAAAC 83768
                                                AGTA
                     ACTCAAGTT AGAAAC
                     TGAGTTCAG TCTTTG
                        ATTG
GAM3706 FLJ10874 3' GCTACTCAGTCCATTAAGAAAC 83769
                                            A AG
                     GCTACTCA GTT TAAGAAAC
                     CGATGAGT CAG ATTCTTTG
                        _ GTA
GAM3706 FLJ20551 3' TACTGCAGAATAGTAAGAA 83770
                                          _ AGT
                     TACT CA TAGTAAGAA
                     ATGA GT ATCATTCTT
                      C CTT
GAM3706 FLJ20758 3' GCTGTTCAAGTTAGAAAA 83771
                                         AC
                                               Т
                     GCT TCAAGTTAG AAGA
                     CGA AGTTCAATC TTTT
                      CA
GAM3706 KIAA0390 3' TCCTGCTCAAGTTACTAAG 83772 G A
                                                G
                     TC CT CTCAAGTTA TAAG
                     AG GA GAGTTCAAT ATTC
                      C
                           G
GAM3706 KIAA1155 3' CTACTCAGCAATAAAA 83773
                                         ΑТ
                     CTACTCA GT AGTAAGA
                     GATGAGT CG TTATTTT
GAM3706 KIAA1344 3' GCTACTCGGAAGTAAGAAA 83774
                                            AAGTT
                     GCTACTC AGTAAGAAA
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CGATGAG TCATTCTTT
                       CCT
GAM3706 KIAA1987 3' GCTCTTTAAGGTAAGAAAC 83775 ACTC TTA
                    GCT AAG GTAAGAAAC
                    CGA TTC CATTCTTTG
                     GAAA
GAM3706 NDUFC2 3' TACTCAAGAAAATAGAGA 83776
                                          TT _
                    TACTCAAG AGTA AGA
                    ATGAGTTC TTAT TCT
                       TT C
GAM3706 LOC138046 3' GCTGCTGTCCAGTAAGAAAC 83777
                                           A CAAG
                    GCT CT TTAGTAAGAAAC
                    CGA GA GGTCATTCTTTG
                     C CA
GAM3707 AQP6 3' TAGCATTTTAACTTCTGAAAGT 83780
                                        CG
        AΤ
                     TAGCAT TTAACTTTT AAAGTAT
                    ATCGTA AATTGAAGA TTTCATA
                      A_
                           С
GAM3707 AQP6
            3' TAGCATTTTAACTTCTGAAAGT 83780
                                          CG
                     TAGCAT TTAACTTTT AAAGTAT
        ΑT
                    ATCGTA AATTGAAGA TTTCATA
                       Α
GAM3707 HPGD
             3' TAGCTTTCCTCTTTTAAAGTAT 83781
                                         ATCG AA
                    TAGC TT CTTTTAAAGTAT
                    ATCG AG GAAAATTTCATA
                      AA GA
                                       GTTAAC
GAM3707 UTX
            3' GCATCTTTCTTAAAGTA 83782
                    GCATC TTTTAAAGTA
                    CGTAG AGAATTTCAT
                      AA
GAM3707 MO25
            3' TAGCTCTACTGTTTTAAAGTAT 83783
                                        A GTTAAC
                    TAGC TC TTTTAAAGTAT
                    ATCG AG AAAATTTCATA
                      _ ATGAC_
GAM3707 LOC92223 3' GCCCAAGAAGCTTTTAAAGTAT 83784 A TT _
                    GC TCG AA CTTTTAAAGTAT
                    CG GGT TT GAAAATTTCATA
                     _ TC C
GAM3708 ANK3
            3' GTCATTAGAGCTATGTG 83787 G TCT T
```

GT CAT TGG AGCTATGTG

CA GTA ATC TCGATACAC

```
GAM3708 C18orf1 3' CGGCATTCTTGGTCAGTG 83788 T AGCTAT
                   CG GCATTCTTGGT GTG
                   GC CGTAAGAACCA CAC
                        GT
GAM3708 GPLD1 3' GTGTTGTTTCCCTCTATGTGT 83789
                                       CA__ TGGTAG
                   GTG TTCT CTATGTGT
                   CAC AAGG GATACACA
                    AACA GA
GAM3708 LOC164295 5' CGTGTGTTCTGGTGGGCCA 83790
                                       CA T A
                   CGTG TTCT GGT GCTA
                   GCAC AAGA CCA CGGT
                     AC CC
GAM3709 ADAT1 3' GCTGGAGTGCAGCGGTAC 83793
                                        TGACCA C
                   GCTGGAGTGC CGG AC
                   CGACCTCACG GCC TG
                       TC____ A
GAM3709 AICDA 3' GCTGGAGTGCAACGGCAC 83794
                                         TGACC
                   GCTGGAGTGC ACGGCAC
                   CGACCTCACG TGCCGTG
                       Т
GAM3709 AIRE 3' ACTGGAGTGCAGTGGCGCA 83795
                                         TGACCAC A
                   GCTGGAGTGC GGC CA
                   TGACCTCACG CCG GT
                       TCA____C
GAM3709 ANKH 3' GCTGGAGTGCGATGGC
                              83796
                                      T CCAC
                   GCTGGAGTGC GA GGC
                   CGACCTCACG CT CCG
                       _ A___
GAM3709 ATP1A2 3' GCTGGAGTGTAATGGCAC 83797
                                        C CCAC
                   GCTGGAGTG TGA GGCAC
                   CGACCTCAC ATT CCGTG
                      _ A__
GAM3709 BAZ1B 5' AGCGGAACGCCACGGCC 83798 T TGC A A
                   AGC GGAG TG CCACGGC C
                   TCG CCTT GC GGTGCCG G
                        _ _ C
GAM3709 C7orf2 3' AGCTGGAGGCTTCAAATGGCA 83799
                                        T GACCAC
                   AGCTGGAG GCT GGCA
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TCGACCTC CGA CCGT

_ AGTTTA GAM3709 CXorf6 3' AGCTGGGGTTGTTGGCCAGGGG 83800 A GC A C CA AGCTGG GT TG CCA GGCA TCGACC CA AC GGT CCGT C ACA C CC GAM3709 CYP4F3 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC GGCAC CGACCTCACG CCGTG TCA GAM3709 DHFR 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC GGCAC CGACCTCACG CCGTG TCA GAM3709 DNASE1 5' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TCA GAM3709 FLRT2 5' GCTGGAGTGCAGCGGCAC 83802 **TGACCA** GCTGGAGTGC CGGCAC 111111 CGACCTCACG **GCCGTG** TC GAM3709 FOXE1 3' ACTGGAGTGCTGACGCAC 83803 **CACG** GCTGGAGTGCTGAC GCAC TGACCTCACGACTG CGTG GAM3709 GP2 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC GGCAC CGACCTCACG CCGTG TTA___ GAM3709 GPRC5C 3' GCTGGAGTGTGACCGCCG 83805 C A GCTGGAGTG TGACC CG CGACCTCAC ACTGG GC CG GAM3709 GPRC5C 3' GCTGGAGTGTGACCGCCG 83805 C A GCTGGAGTG TGACC CG CGACCTCAC ACTGG GC CG TGACC _ GAM3709 HIP1 3' GCCGGAGTGCACTGGCAC 83806 GCTGGAGTGC AC GGCAC

CGGCCTCACG TG CCGTG ____ A GAM3709 HUNK 3' AGCTGGAGTGCAGTAGCA 83807 **TGACCAC** AGCTGGAGTGC **GGCA** Ш TCGACCTCACG TCGT TCA___ GAM3709 IRAK4 3' GCTGGAGTGCAGTGGCAC **TGACCAC** 83801 GCTGGAGTGC GGCAC CGACCTCACG CCGTG TCA GAM3709 KAI1 3' GCTGGAGTGCAGTAGCAC 83808 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG TCGTG TCA GAM3709 NPHP1 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TTA GAM3709 NT5C2 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TTA GAM3709 OGG1 5' GCTGGAGTGTGATGGC C CCAC 83809 GCTGGAGTG TGA GGC CGACCTCAC ACT CCG _ A_ C CCAC GAM3709 OGG1 5' GCTGGAGTGTGATGGC 83809 GCTGGAGTG TGA GGC CGACCTCAC ACT CCG _ A___ GAM3709 OGG1 5' GCTGGAGTGTGATGGC C CCAC 83809 GCTGGAGTG TGA GGC CGACCTCAC ACT CCG _ A_ GAM3709 PA2G4 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC GGCAC CGACCTCACG

CCGTG

CG

TCA_

3' ACTGGAGTGCTGACCAGCA 83810

GCTGGAGTGCTGACCA GCA

GAM3709 PEPD

TGACCTCACGACTGGT CGT

GAM3709 PML 3' GCAGGAGTGCTGGCTTGGACCA 83811 T CA GC GGAGTGCT GACCACG CG CCTCACGA CTGGTGT Т CCGAAC 3' GCAGGAGTGCTGGCTTGGACCA 83811 T GAM3709 PML CA GC GGAGTGCT GACCACG CG CCTCACGA CTGGTGT Т CCGAAC GAM3709 PRKCG 3' AGCTGGAATGCTGGGGTGCA 83812 ACCACG AGCTGGAGTGCTG GCA TCGACCTTACGAC CGT CCCA__ GAM3709 PRKY 3' CTGGAGTGCACTGGCAC 83813 TGACC CTGGAGTGC AC GGCAC GACCTCACG TG CCGTG ____ A 3' AGCTGGAATGTTGGGCCACA 83814 GAM3709 PRV1 СА AGCTGGAGTG TG CCACG TCGACCTTAC AC GGTGT A CC GAM3709 PSMB9 3' ACTGGAGTGCAGTGGCAC 83815 **TGACCAC** GCTGGAGTGC GGCAC TGACCTCACG CCGTG TCA GAM3709 PTGIS 3' GCTGGAGTGCCGTGGCC ACCAC A 83816 GCTGGAGTGCTG GGC C CGACCTCACGGC CCG G A____ C GAM3709 PYCR1 5' ACTGGAGTGTTGGTCATGCAGC 83817 C AC __ GCTGGAGTG TG CA CGGC TGACCTCAC AC GT GTCG A CA AC GAM3709 RANBP2L1 3' AGCTGGAGTGCAGTGGTAC 83818 TGACCAC C AGCTGGAGTGC GG AC TCGACCTCACG CC TG TCA____A GAM3709 RPN1 5' GCTGGAGTGTGATGGC 83809 C CCAC GCTGGAGTG TGA GGC

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GAM3709 SLC26A4 3' GCTGGAGTGCAGTGGCAC 83801
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                    GCTGGAGTGC GGCAC
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                       TCA
GAM3709 SMG1 3' GCTGGAGTGCAGTGGCAC 83801
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                   GCTGGAGTGC
                                GGCAC
                    11111
                    CGACCTCACG
                                CCGTG
                       TCA
GAM3709 STK38 5' GCTGGAGTGCGACAGG
                                83819
                                        T CAC
                    GCTGGAGTGC GAC GG
                   CGACCTCACG CTG CC
                       Т
GAM3709 TNNC1 3' AGTTGGAGGCTGGGCA
                                83820 C T ACCAC
                   AG TGGAG GCTG GGCA
                   TC ACCTC CGAC CCGT
                    Α _ ___
GAM3709 TRIM9 3' AGCTGGCGCCTCCACGGCACA 83821 AG GA
                    AGCTGG TGCT CCACGGCACA
                    TCGACC GCGG GGTGCCGTGT
                      __ A_
GAM3709 VHL
           3' GCTGGAGTGCAGCGGCA 83822
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                   GCTGGAGTGC
                               CGGCA
                    CGACCTCACG GCCGT
                       TC
GAM3709 VIL2 3' AGCTGGAGTCTGAAAGC
                                       G CCAC
                               83823
                   AGCTGGAGT CTGA GGC
                    TCGACCTCA GACT TCG
                       _ T___
GAM3709 XT3
           3' ACTGGAGTGGAGTGGCA 83824
                                        CT CCAC
                    GCTGGAGTG GA GGCA
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|||||||| ||||
TGACCTCAC CT CCGT

__ CA__

GAM3709 ZNF264 3' GCTGGAGTGCAGTGGCAC 83801 TGACCAC
GCTGGAGTGC GGCAC

GAM3709 BSPECV 5' GCTGGGGTGACGGCAC 83825 A CTGACC GCTGG GTG ACGGCAC ||||||||||

| | CGACC CAC TGCCGTG | |
|----------------------------|--|---------|
| GAM3709 C1orf34 3' GCTGG | AGTGCTATGGC 83826 GCTGGAGTGCTG GGC | ACCAC |
| | CGACCTCACGAT CCG A | |
| GAM3709 C20orf12 3' GCTGC | GAGTGCGATGGC 83796 GCTGGAGTGC GA GGC | T CCAC |
| | CGACCTCACG CT CCG | |
| GAM3709 C20orf150 3' AGCT0 | | _ |
| | С | |
| GAM3709 C20orf177 3' GCTG | GAGTGCAATGGCAC 83804 GCTGGAGTGC GGCAC | TGACCAC |
| | CGACCTCACG CCGTG TTA | |
| GAM3709 C21orf108 3' GCTG | GAGCGCAATGGCAC 83828 GCTGGAGTGC GGCAC CGACCTCGCG CCGTG | TGACCAC |
| OAMO700 00-40 OLAQOTAG | TTA | OT 0040 |
| GAM3709 C8orf2 3' AGCTAC | AGCTGGATGGCA 83829 AGCTGGAGTG GA GGCA TCGATCTCAC CT CCGT | CT CCAC |
| | C_ A | |
| GAM3709 CAMKK2 5' GCTG | GAGTGCAGTAGCAC 83808 GCTGGAGTGC GGCAC | TGACCAC |
| | CGACCTCACG TCGTG TCA | |
| GAM3709 CCR6 3' GCTGG | AGTGCAATGGCAC 83804 GCTGGAGTGC GGCAC | TGACCAC |
| | CGACCTCACG CCGTG TTA | |
| GAM3709 CCR6 3' GCTGG | AGTGCAATGGCAC 83804 GCTGGAGTGC GGCAC | TGACCAC |
| | CGACCTCACG CCGTG TTA | |
| GAM3709 CPR2 3' GCTGG | AGTGCAGTGGCAC 83801 GCTGGAGTGC GGCAC | TGACCAC |

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GAM3709 DDX34 3' GCTGGAGTGCAGTGGCAC 83801
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                               GGCAC
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GAM3709 DJ122O8.2 3' GCTGAAGTGCAGTGGCAC 83830
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                   GCTGGAGTGC
                                GGCAC
                    CGACTTCACG
                               CCGTG
                       TCA
GAM3709 DKFZP434C0826 5' AGCTGGAGGTTGGCCAGGCA 83831
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                   AGCTGGAG TG CCA GGCA
                   TCGACCTC AC GGT CCGT
                      CA C
GAM3709 DKFZP434I1735 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 DKFZP564I0422 3' GCTGGAGTGCAGTCGTGCA 83832
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                   GCTGGAGTGC CG GCA
                   CGACCTCACG GC CGT
                       TCA___ A
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GAM3709 DKFZp762K222 5' AACTGGGAGCCACGGCAC 83833
                   AGCTGG GA CCACGGCAC
                   TTGACC CT GGTGCCGTG
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GAM3709 DRF1 3' GCTGGAGTGCAGTGGCAC 83801
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                                GGCAC
                   CGACCTCACG
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                       TCA
GAM3709 ET 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 FBXO9 3' GCTGGAGTGGAATGGCAC 83834
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                   CGACCTCAC CT CCGTG
                       _ TA_
GAM3709 FKBP14 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 FKSG17 3' GCTGGAGTGCCGTGGTGCA 83835
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                                    CGT
                          ACCA
GAM3709 FLJ10781 3' GCTGGAGTGCCGTGGCAC
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                     CGACCTCACGGC
                                   CCGTG
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GAM3709 FLJ10826 3' GCTGGAGTGCAGTGGCAC
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                                  CCGTG
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GAM3709 FLJ11301 3' GCTGGAGTGCAGCGGCC
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                         TC____ C
GAM3709 FLJ11722 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 FLJ12078 3' GCTGGAGCGCAGTGGCAC 83838
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                                  CCGTG
                         TCA
GAM3709 FLJ12190 3' GCTGGAGTGCAGTAGCAC 83808
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GAM3709 FLJ12294 3' GCTGGAGTGCAGTGGCAC
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GAM3709 FLJ12687 3' GCTGGAGTGCAGTGGCAC
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GAM3709 FLJ13117 3' GCTGGAGTGCAGTGGCAC
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GAM3709 FLJ13769 3' GCTGGAGTGCAATGGCAC
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GAM3709 FLJ14397 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 FLJ20546 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 FLJ22009 3' AGCTGGAATGCAGTGGCC
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                     TCGACCTTACG
                                  CCG G
                         TCA C
GAM3709 FLJ22692 3' GCTGAAGTGCAGTGGCAC 83830
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GAM3709 FLJ23040 3' GCTGGAGTGCAGTGGCAC
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GAM3709 FLJ23556 3' AGCTGGAGGCGGTGGCAC
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                                  GGCAC
                     TCGACCTC CG
                                  CCGTG
                        _ CCA_
GAM3709 FLJ31737 3' AGCGGAGTGCTGGAGTGCA 83842
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                     AGC GGAGTGCTG GCA
                     Ш
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TCG CCTCACGAC
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GAM3709 FLJ32915 5' GCTGGAGTGCAGTGGCAC 83801
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                                  CCGTG
                         TCA
GAM3709 GMNN
             5' GCTGGAGTGCCCGGC
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                     GCTGGAGTGCT
                                  CGGC
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                     CGACCTCACGG
                                  GCCG
GAM3709 GNB4
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                     GCTGGAGTGC
                                  GGCAC
                     CGACCTCACG
                                  CCGTG
                         TCA
GAM3709 GP5
            3' GCTAGAGTGCAGTGGCAC
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                     GCTGGAGTGC
                                  GGCAC
                     Ш
                     CGATCTCACG
                                  CCGTG
                         TCA
GAM3709 GTSE1 3' GCTGGAGTGCAGTGGCAC 83801
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                                  CCGTG
                         TCA
GAM3709 HSD17B7 3' GCTGGAGTGCAGTGGCAC 83801
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                     GCTGGAGTGC
                                  GGCAC
                     CGACCTCACG
                                  CCGTG
                         TCA
                                             T GA C
GAM3709 HSNOV1 3' AGCTGGAGGCTCCCAGGCA 83845
                     AGCTGGAG GCT CCA GGCA
                     TCGACCTC CGA GGT CCGT
                        _ G_ _
GAM3709 ICAM4 3' GCTGGAGTGCAGTGGCAC
                                            TGACCAC
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                     GCTGGAGTGC
                                  GGCAC
                     Ш
                     CGACCTCACG
                                  CCGTG
                         TCA
GAM3709 ICAM4
             3' GCTGGAGTGCAGTGGCAC
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                                  GGCAC
                     CGACCTCACG
                                  CCGTG
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GAM3709 IL-23R 3' GCTGGAGTGCAGTGGCAC
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                                  GGCAC
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CGACCTCACG **CCGTG** TCA GAM3709 IMAGE:4907098 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TCA GAM3709 KBRAS2 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC GGCAC CGACCTCACG CCGTG TCA GAM3709 KIAA0057 3' GCTGGAGTGCCATGGTAC 83846 TGAC C C GCTGGAGTGC CA GG AC CGACCTCACG GT CC TG ___ A A GAM3709 KIAA0252 3' ACTGGAGTGCAGTGGCAC 83815 **TGACCAC** GCTGGAGTGC **GGCAC** TGACCTCACG CCGTG TCA GAM3709 KIAA0266 3' GCTAGAGTGCAGTGGCAC 83844 **TGACCAC** GCTGGAGTGC **GGCAC** CGATCTCACG CCGTG TCA GAM3709 KIAA0355 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG **CCGTG** TCA GAM3709 KIAA0419 3' ACTGGAGTGCAATGGCAC 83847 **TGACCAC** GCTGGAGTGC **GGCAC** TGACCTCACG CCGTG TTA GAM3709 KIAA0447 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG **CCGTG** TTA GAM3709 KIAA0475 3' GCTGGAGTGCAGCAC 83848 **TGACCA** GCTGGAGTGC CGGCAC CGACCTCACG GTCGTG TC GAM3709 KIAA0752 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC **GGCAC**

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CGACCTCACG
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GAM3709 KIAA0795 3' GCTGGAATGCAGTGGCAC 83849
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GAM3709 KIAA1160 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 KIAA1193 3' GCTGGAGTCTGGCCCCTGC 83851
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                        _ C GGA
GAM3709 KIAA1271 3' GCTGGAGCGCAGTGGCAC 83838
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GAM3709 KIAA1297 5' AGCAGGCGGCCACGGCAC 83852 T A CTGA
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GAM3709 KIAA1328 3' GCTGGAGTGCAGCGGCA
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GAM3709 KIAA1340 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 KIAA1559 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 KIAA1872 3' GCGTGGGTGGGCCACGGCA 83854 A CTGA
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                     CG ACC CAC GGTGCCGT
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GAM3709 KIAA1872 3' GCTGGAATGCAGTGGCAC 83849
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GAM3709 KIAA1878 3' GCTGAGCTTCTGTGGCAC 83855
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                     CGAC TCG GAC CCGTG
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GAM3709 KIAA1948 3' AGCTGGAGTGCAGTGGTAC 83818
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                                   GG AC
                     TCGACCTCACG
                                   CC TG
                         TCA____ A
GAM3709 KIAA1969 3' AACTGGAGTGCAGTGGTAC 83856
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                     AGCTGGAGTGC
                                   GG AC
                     \parallel \parallel \parallel
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GAM3709 LRG
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CGATCTCACG
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GAM3709 LYPLA3 3' AGCTGGGTGCTGGCCAGGG 83857
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GAM3709 MCAM
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GAM3709 MGC10200 3' ACTGGAGTGCAGTGGCAC 83815
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GAM3709 MGC10814 3' GCTGGAGCGCAATGGCAC 83828
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GAM3709 MGC13017 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 MGC14407 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 MGC16332 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 MGC29937 3' GCTGGAGTGCAACGGC
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                                 TGCCG
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GAM3709 MGC5457 3' GCTGGAGTGCAATGGCAC 83804
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CGACCTCACG
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GAM3709 MOST2 5' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 MRP63
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GAM3709 NMNAT 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 Nup43
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                                        A C ACCAC A
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                                 GGC C
                    TCGACC CGC AC
                                 CCG G
                      _ _ CA___ C
GAM3709 PDCD7
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                    CGACCTCACGGC
                                 CCG
GAM3709 PNPASE 3' AGCTGGAGTGCAATGGCC
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GAM3709 PRO2730 3' GCCGGAGTGCAATGGCAC 83862
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GAM3709 QSCN6 3' AGCTGGAGGCTGGCCAGGCA 83863
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GAM3709 RoXaN
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GAM3709 Rpo1-2 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 Rpo1-2 3' GCTGGAGTGTGGTGGCAC 83865
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GAM3709 SC65 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 SCAND2 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 SCIN
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GAM3709 SH3BGRL2 3' GCGGAGTGCTGGGCA
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                                  83867 T
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                    CG CCTCACGAC
                                 CCGT
GAM3709 SNAPC1 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 SPTLC2 3' GCTAGAGTGCAGTGGCAC 83844
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GAM3709 STK36 3' AGTTGGAGGCTGGACCGCA 83868 C T _ ACG

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GAM3709 THEA 3' GCTGGAATGCAGTGGCAC 83849
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GAM3709 TRIAD3 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC114987 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC115129 3' GCTGGAATGCAGTGGCAC 83849
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GAM3709 LOC124222 3' AGTTGGAGCGCCACGGC
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GAM3709 LOC127428 3' AGCTGGAGTGTCTGGCTTGC 83873
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GAM3709 LOC138389 5' GCTGAGTGCTGGGCCCACA 83874
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GAM3709 LOC142937 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC144465 3' GCTGGAGTGCAACGGCAC 83794
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GAM3709 LOC144563 3' AGCTGGAGTGCAGTGGCA 83872
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GAM3709 LOC146880 3' AGCTGAGTGCTGAGTTGCA 83875
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GAM3709 LOC147664 3' GCTGGAGTGGAATGGCAC 83834
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GAM3709 LOC148534 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC149073 3' GCTGGAGTGGAGTGGCAC 83876
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GAM3709 LOC149113 5' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC149464 5' AGCTGAAGTGCAGTGGCAC 83877
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GAM3709 LOC150244 3' GCTGGAGTGCGTGCAGTGGCAC 83878
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GAM3709 LOC150889 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC150960 3' AGCTGGAGTGCAGTGGCAC 83839
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GAM3709 LOC152271 3' GCTGGAGTGCACTGGCA
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GAM3709 LOC152445 3' ACTGGAGTGCAATGGCAC 83847
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GAM3709 LOC152453 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC154403 5' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC154791 3' GCTGGAGTGAGTGCCATGGC 83881
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CGACCTCAC AC GGT CCG TC _ A GAM3709 LOC154992 5' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC GGCAC CGACCTCACG CCGTG TTA GAM3709 LOC158160 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC GGCAC CCGTG CGACCTCACG TCA GAM3709 LOC158187 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TCA GAM3709 LOC158572 3' AGTTGGAGTGCTGTCCACA 83882 C AG TGGAGTGCTG CCACG TC ACCTCACGAC GGTGT Α ACA GAM3709 LOC158819 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TCA GAM3709 LOC158987 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG **CCGTG** TCA GAM3709 LOC159121 5' AGCTGGAGCTGCTTGTGGTGCA 83883 GACCACG AGCTGGAG TGCT GCA Ш TCGACCTC ACGA CGT G ACACCA GAM3709 LOC161823 3' GCTGGAGTGCTGTAGCA **ACCAC** 83884 GCTGGAGTGCTG GGCA CGACCTCACGAC **TCGT** Α GAM3709 LOC162962 3' GCTGGAGTGCACTGGCAC 83885 TGACC _ GCTGGAGTGC AC GGCAC

GAM3709 LOC196047 5' GCTGGAGTGCAATGGCAC 83804 TGACCAC GCTGGAGTGC GGCAC ||||||||||

CGACCTCACG TG CCGTG

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GAM3709 LOC197132 3' AGCTGGAGTGCAATGGCC 83861
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GAM3709 LOC200316 3' AACTGGAGTTCTGTGGC
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GAM3709 LOC200731 3' GCTGGAGTGCAGTAGCAC 83808
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GAM3709 LOC201182 5' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC219672 5' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC220038 3' GCTGGAATGCTGTGGCC
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GAM3709 LOC220692 3' AGCTGGAGTGCAGTGGTAC 83818
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GAM3709 LOC221042 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC221288 3' GCTGGAGTGCTGTGGC
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GAM3709 LOC221337 3' GCTGGAGTGCAACGGC
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GAM3709 LOC221474 3' GCTAGAGTGGAGTGGCC
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CGATCTCAC CT CCG G __ CA__ C GAM3709 LOC222066 3' AGCTGGAGTGCAATGGCA 83869 **TGACCAC** AGCTGGAGTGC **GGCA** TCGACCTCACG CCGT TTA GAM3709 LOC222182 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC GGCAC Ш CGACCTCACG CCGTG TTA GAM3709 LOC222256 3' GCTAGAGTGCAGTGGCAC 83844 **TGACCAC** GCTGGAGTGC GGCAC 11111 CGATCTCACG CCGTG TCA GAM3709 LOC253039 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TCA GAM3709 LOC254531 5' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG **CCGTG** TCA GAM3709 LOC255042 3' GCTAGAGTGCAATGGCAC 83886 **TGACCAC** GCTGGAGTGC **GGCAC** CGATCTCACG **CCGTG** TTA GAM3709 LOC255177 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TCA GAM3709 LOC255326 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG **CCGTG** TCA GAM3709 LOC255328 3' GCTGGAGTGCAATGGCAC 83804 **TGACCAC** GCTGGAGTGC **GGCAC** CGACCTCACG CCGTG TTA GAM3709 LOC256980 3' GCTGGAGTGCAGTGGCAC 83801 **TGACCAC** GCTGGAGTGC **GGCAC**

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GAM3709 LOC90092 3' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC90092 5' GGATGCCACGGCACA
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GAM3709 LOC90141 3' GCTGGAGTGCGACAGTGCA 83894
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GAM3709 LOC90155 5' GCTGGAGTGCAATGGCAC 83804
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GAM3709 LOC90624 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC91547 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC91812 3' GCTGGAGTGCAGTGGCAC 83801
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GAM3709 LOC92973 5' GCTGGAGTGCAGTGGCAC 83801
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GAM3710 NEK4 3' TTTAAAATTTTATAATTTATCA 83897 T
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                     TTTA AATTTTATAATTTAT AA
        Α
                    AAAT TTAAAATATTAAATA TT
                      Т
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GAM3711 CARD4 3' GTAGCCTAGCAGAGGAGAAG 83900
                                           CCC CC
                    GTAGCC GT AGGAGAAG
                    CATCGG CG TCCTCTTC
                       AT_ TC
GAM3711 ENPP3 3' CACTCAGCCCTGTCTAGGAGAA 83901 AG
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                     TA TAGCCC GTC AGGAGAAG
        G
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                     GΑ
GAM3711 FGF9
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                    CGTCGGG AGGTCCTC
            3' CAAGTAGCTCTGAGAGGGGAAG 83903
GAM3711 MSN
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GAM3711 NOTCH2 3' TAACTGGCCCAAGGAGAA 83904
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                      AC__ T
GAM3711 PKD1
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TCG TCGGGGGT TCCTC
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GAM3711 SCNN1B 3' AAGTGGCCTGCCACCAGGAGA 83906 A C_ T
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                     C AC
                                          CCCC CC
GAM3711 TUBG1 3' TAAATAGTCTCATAAGAGGAGA 83907
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                      AGA TTC
GAM3711 WNT3A 3' GCCCGCCCGTCCAGGGGGA 83908 A C
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                    CG CGGGG CAGGTCC CT
                     GG CC
GAM3711 ARHF 3' GTGGCCTCCGTGTTCCTGGGGG 83909 A C ___ A_ A
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                    CA CGG GGC AGG CC CTTC
                     C A ACA AC C
GAM3711 BM-009 3' GCAGTTTTGCCATGCAGGAGAA 83910
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                    CGTC GGTA GTCCTCTTC
                     AAAAC C
GAM3711 CAPN13 3' GTGGCCGAGTAGGAGAAG 83911 A CCC CC
                    GT GCC GT AGGAGAAG
                    CA CGG CA TCCTCTTC
                     C CT_ _
GAM3711 FLJ12529 3' AAGTAGCCTTCTGGGGGAAG 83912 CCCG CA A
                    AAGTAGCC TC GG GAAG
                    TTCATCGG AG CC CTTC
                       A___ AC C
GAM3711 GDAP1L1 3' TAGTCCATGTCCAGGAGAA 83913 C CC
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                    ATC GG CAGGTCCTCTT
                     A TA
GAM3711 KIAA0863 3' AGTAGTTAAGTTAGGAGAAG 83914
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                    TCATC CA TCCTCTTC
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GAM3711 STX3A 3' TAAGTAGCCTTTGCAAAGGAA 83915
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TAAGTAGCC GT AGGAG

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AAA TT
GAM3711 UQCR 3' AGGGGCCCCCATGGGAA 83916 TA
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GAM3711 LOC116411 5' AGAGTCCAGGCCAGGAGA 83917 T C CC T
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                    TC TC GG C GGTCCTCT
                     A TC
GAM3711 LOC146433 3' GCAGCACCAGGAGAAG
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GAM3711 LOC146599 5' GTAGCCCCCGCAGAAG
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GAM3711 LOC153259 5' GTTGCCCCATCCAGGAGAAG 83920 A C
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GAM3711 LOC155060 3' AAGTGGCCCCCAGGAGA
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GAM3711 LOC202050 5' AGCAGTTCCTGAGGAGAAG 83922
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GAM3711 LOC92710 3' GTAGCCCCTGTCTAGGTTAAG 83923
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GAM3712 AKAP13 3' GCAGGGGACACAGCCAGTG 83926
                                          AC
                                               AA
                    GCA GGACACGGC TAGTG
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GAM3712 ITPR3 3' GCATGGACACGACAGTG
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                                             ATA
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GCA GGACACGGCA GTG

ATTCATCGG CG TCCTT

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CGT CCTGTGCTGT CAC
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GAM3712 LOC115051 3' ACAACGGATATGCAACGTG 83929
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                     TGTTGCCT CGTTG CAC
                        ATA
GAM3712 LOC143666 3' TAGCGGTAGAAGAAATAGTGA 83930
                                             AAC CAC C
                     TAGC GGA GG AATAGTGA
                     ATCG TCT TC TTATCACT
                      CCA T
GAM3712 LOC196374 3' GCAGCGGACACGGAGT
                                    83931
                                          Α
                                              CAAT
                     GCA CGGACACGG AGT
                     CGT GCCTGTGCC TCA
                      С
GAM3712 LOC253258 3' TAGCGGTAGAAGAAATAGTGA 83930
                                             AAC CAC C
                     TAGC GGA GG AATAGTGA
                     ATCG TCT TC TTATCACT
                      CCA ___ T
GAM3713 ABCE1
             3' CCTTGGCTGCCCAACAGAAAA 83934
                                           CAACATT
                     CCT
                          CTCAACAGAAAA
                     Ш
                         GGGTTGTCTTTT
                     GGA
                      ACCGAC_
GAM3713 ASGR2 3' CCTCAAAATCCTCAACAGA 83935
                                           С
                     CCTCAA ATTCTCAACAGA
                     GGAGTT TAGGAGTTGTCT
                       Т
GAM3713 ASGR2 3' CCTCAAAATCCTCAACAGA 83935
                                           С
                     CCTCAA ATTCTCAACAGA
                     GGAGTT TAGGAGTTGTCT
GAM3713 ASGR2
            3' CCTCAAAATCCTCAACAGA 83935
                                           C
                     CCTCAA ATTCTCAACAGA
                     GGAGTT TAGGAGTTGTCT
                       Т
GAM3713 ASGR2
             3' CCTCAAAATCCTCAACAGA 83935
                                           C
                     CCTCAA ATTCTCAACAGA
```

```
GGAGTT TAGGAGTTGTCT

T

GAM3713 DNCI1 3' ACCTCAACAGCAGCAGA 83936 TTCT A

ACCTCAACA CA CAGA

||||||||| || |||
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TGGAGTTGT GT GTCT

C C

GAM3713 FMO2 3' CCCAGGATTTTCAACAGAAAA 83937 AC C CTCA ATT TCAACAGAAAA

GGGT TAA AGTTGTCTTTT

CC A

GAM3713 HS2ST1 3' CACTTCAACATCAGAA 83938 C TCTCAA

TAC TCAACAT CAGAA

GTG AGTTGTA GTCTT

4

GAM3713 HS2ST1 3' TACCTGACTCTCAATAGAAA 83939 CAAC C

TACCT ATTCTCAA AGAAA

ATGGA TGAGAGTT TCTTT

C___ A

GAM3713 OLFM1 3' CACCTCAAGGGAATAACAGAA 83940 CATTCTC

TACCTCAA AACAGAA

GTGGAGTT TTGTCTT

CCCTTA

GAM3713 PIK3CD 3' TACCTCAGCACTCTCACAG 83941 A A

TACCTCA CATTCTCA CAG

ATGGAGT GTGAGAGT GTC

С

GAM3713 PSAP 3' TCAACATCCATCTAGCAGA 83942 _ AA_

TCAACATTC TC CAGA

AGTTGTAGG AG GTCT

T ATC

GAM3713 TCEA1 3' CTCACTCATTGACAGAAAA 83943 ACATT ____

CTCA CTCA ACAGAAAA

GAGT GAGT TGTCTTTT

____ AAC

GAM3713 TIM3 3' CTCAACATTCCAAGGGAA 83944 T CA

CTCAACATTC CAA GAA

GAGTTGTAAG GTT CTT

_ CC

GAM3713 TNFSF4 3' CCTCTCATTTAACAGAAA 83945 AA CTC

CCTC CATT AACAGAAA

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A_ A__
                                         TC A_
GAM3713 BAIAP1 3' CCTCAACATATCACTCAG 83946
                    CCTCAACAT TCA CAG
                    GGAGTTGTA AGT GTC
                        T GA
GAM3713 DKFZP564F013 3' ACCTCAACATTAGACAATAGA 83947
                                            CT C
                    ACCTCAACATT CAA AGA
                    TGGAGTTGTAA GTT TCT
                        TCT A
GAM3713 DKFZP564O0463 3' CCTTTTCTTTCAACAGAAAA 83948 CAACA C
                    CCT TT TCAACAGAAAA
                    GGA AA AGTTGTCTTTT
                     AAAG_ _
GAM3713 DKFZP586M0622 5' CCTCAGCTACAACAGAAAA 83949 TTCTC
                    CCTCA ACA AACAGAAAA
                    GGAGT TGT TTGTCTTTT
                      CGA ___
GAM3713 DKFZp761J139 5' CTCAGCTCCTAGTAACAGAAA 83950 ACA C
                    CTCA TTCT AACAGAAA
                    GAGT AGGA TTGTCTTT
                      CG TCA
GAM3713 FKBP9 3' TCAACATTTTATATCAGAAAA 83951
                                           CTCAA
                    TCAACATT
                              CAGAAAA
                    AGTTGTAA
                              GTCTTTT
                       AATATA
GAM3713 FLJ10546 5' CCTCAACACTCAGTAACAGA 83952
                                             TC
                    CCTCAACATTC AACAGA
                    GGAGTTGTGAG TTGTCT
                         TCA
GAM3713 HARS2 3' TACCTCAATATAATCATAGAAA 83953
                                            C TC AC
        Α
                     TACCTCAA AT TCA AGAAAA
                    ATGGAGTT TA AGT TCTTTT
                       A TT A
GAM3713 HMGN4 3' CTCGATGTCATCAACAGAAA 83954
                                          AACAT _
                    CTC TC TCAACAGAAA
                    GAG AG AGTTGTCTTT
                     CTAC_ T
GAM3713 HSHIN1 3' TACCTCAATATATGTTATAGAA 83955
                                            C TCTCAAC
        Α
                     TACCTCAA AT AGAAA
```

GGAG GTAA TTGTCTTT

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ATGGAGTT TA
                               TCTTT
                       A TACAATA
GAM3713 KIAA1729 5' TACTTCAACATTTTTGTTCTCA 83956 C
        Α
                     TAC TCAACAT TCTCAA
                    ATG AGTTGTA
                               AGAGTT
                     Α
                        AAAACA
GAM3713 KLF12 3' TACTCTCAAGACATCTTTCAGC 83957
                                        _ __ C_ A
                      TAC CTCA ACATT TCA CAGA
        AGA
                    ATG GAGT TGTAG AGT GTCT
                     A TC AA C
GAM3713 KPNA6 3' TACCGTAATTCAAACAGAAA 83958
                                       TCAAC TC
                    TACC ATTC AACAGAAA
                    ATGG TAAG TTGTCTTT
                      CAT T
GAM3713 MGC16175 3' TACCTCAAAGGAGATAACAGAA 83959
                                            CATTCTC
        AA
                     TACCTCAA AACAGAAAA
                    TTGTCTTTT
                    ATGGAGTT
                       TCCTCTA
GAM3713 MGC4643 3' CTCAACTTCCAACAGAA 83960
                                         АТ
                    CTCAAC TTC CAACAGAA
                    GAGTTG AAG GTTGTCTT
                                             AA___
GAM3713 MGC5338 3' CTAACATTCTCCTATGCAAA 83961 C
                    CT AACATTCTC CAGA
                    GA TTGTAAGAG GTTT
                         GATAC
GAM3713 PRO1048 3' TCTGCATCTCAACAGAA 83962 AA T
                    TC CAT CTCAACAGAA
                    AG GTA GAGTTGTCTT
                     AC _
GAM3713 SS18L1 3' CTCAACATTCATATGACAGAA 83963
                                            TCA__
                    CTCAACATTC ACAGAA
                    GAGTTGTAAG TGTCTT
                        TATAC
GAM3713 TU12B1-TY 3' CTCAACAAAACAAAACAGAAA 83964
                                            TTCTC
                    CTCAACA AACAGAAA
                    GAGTTGT
                             TTGTCTTT
                       TTTGTT
GAM3713 TUCAN 3' TACCTTGAAATCTGACAGAAAA 83965
                                           CAACAT CA
                    TACCT TCT ACAGAAAA
```

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ACTTT_ C_
GAM3713 LOC149837 3' TCAGCATCCCTCAGAAAA 83966 A
                                              CAA
                     TCA CATTCT CAGAAAA
                     AGT GTAGGG GTCTTTT
                      C A
GAM3713 LOC150622 3' ACCTCAATGGATGTAACAGAAA 83967
                                            CATTCTC
                     ACCTCAA
                              AACAGAAA
                     TGGAGTT
                              TTGTCTTT
                        ACCTACA
GAM3713 LOC150862 3' TACCTCAAAATGCTTCAGA 83968
                                             C T CAA
                     TACCTCAA AT CT CAGA
                     ATGGAGTT TA GA GTCT
                        T C A__
GAM3713 LOC219857 3' CCTTACTGTACCAACAGAAA 83969
                                           CA ATTC
                     CCT AC TCAACAGAAA
                     GGA TG GGTTGTCTTT
                      A_ ACAT
GAM3713 LOC220549 3' TCAGCATTTCAGACAGAAAA 83970
                                           A C
                     TCA CATT TCA ACAGAAAA
                     AGT GTAA AGT TGTCTTTT
                                            T TTC _
GAM3713 LOC220739 5' TACCCAACAGAATCAGACAG 83971
                     TACC CAACA TCA ACAG
                     ATGG GTTGT AGT TGTC
                      CTT C
GAM3713 LOC257277 5' TCAACATTTTCAGCCAAAA 83972
                                             CA
                     TCAACATT TCA CAGAA
                     AGTTGTAA AGT GTTTT
                        A CG
GAM3714 AICDA 3' CATTTCTAAAGTTATAAATT 83975
                     CATTTCTAAA TATAAATT
                     GTAAAGATTT ATATTTAA
                         CA
GAM3714 NAPB 3' CATTTCAAATATAAATCA 83976
                                         Т
                     CATTTC AAATATAAATTA
                     GTAAAG TTTATATTTAGT
GAM3714 SPAP1 5' CATTTCTAAACATATATT 83977
                                            Α
                     CATTTCTAAATATA ATT
```

ATGGA AGA TGTCTTTT

```
GTAAAGATTTGTAT TAA
GAM3714 SPAP1 5' CATTTCTAAACATATATT 83977
                                         Α
                   CATTTCTAAATATA ATT
                   GTAAAGATTTGTAT TAA
                        Α
GAM3715 BCL11A 3' AGGGAGTGGGGCTGGAGGGCGA 83980
                                         AT___ TT C
        TGG
                     AGGGAGTGGG AGGG CGA GG
                   TCCCTCACCC TCCC GCT CC
                       CGACC A
GAM3715 CALM3
            3' GGGGGTGGGGTGGGAGG 78259
                                        A ATA TTC C
                   GGG GTGGG GGG GA GG
                   CCC CACCC CCC CT CC
                    C CA
GAM3715 CASQ2 3' AGGGAGTGGGAAAAGAGATGAT 83981
                                           T TTC C
        GG
                     AGGGAGTGGGA AGGG GA GG
                   TCCCTCACCCT TCTC CT CC
                       TT TA_A
GAM3715 CHN1
            5' AGAGAGTGGGGTGCCCGATGG 83982
                                           ATAGG C
                   AGGGAGTGGG GTTCGA GG
                   TCTCTCACCC CGGGCT CC
                       CA A
GAM3715 CHST1 3' AGGGAGTGGGGTGAGCT 83983
                                         ATA
                   AGGGAGTGGG GGGTT
                   TCCCTCACCC CTCGA
                       CA
           3' AGGGGGTGGGGGAGCTCAA 83984
GAM3715 MN1
                                       A ATA
                   AGGG GTGGG GGGTTCGA
                   TCCC CACCC CTCGAGTT
                     C C_
GAM3715 PTGFRN 3' AGGGGGTGGGGTAGGGTCG 83985
                                               Т
                   AGGG GTGGG TAGGGT CG
                   TCCC CACCC ATCCCA GC
```

C C _

GAM3715 SELENBP1 3' AGGGAGTGTGGGTGATGAGGGT 83986 ___ _ _ _ _

AGGGAGT GG GAT AGGGT

||||||| || ||||||

TCCCTCA CC CTA TCCCA

CAC A C

GAM3715 SMT3H1 3' AGGGAGTGGGGTGGGAGGGGTG 83987 ATA TTC

GAM3715 SMT3H1 3' AGGGAGTGGGGTGGGAGGGGTG 83987 ATA TTCGAC

G AGGGAGTGGG GG GG

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TCCCTCACCC CCC
                                   CC
                       CA_ TCCCCA
                                         AT TT
GAM3715 SORCS3 5' GGGAGTGGGGAGGGGGG 83988
                    GGGAGTGGG AGGG CG
                    CCCTCACCC TCCC GC
                       C CC
GAM3715 SUOX 5' GGGAATGGGGTAGGAGGGATGG 83989
                                            A TTC C
                    GGGAGTGGG TAGGG GA GG
                    CCCTTACCC ATCCT CT CC
                       C CC A
GAM3715 BCL2L1 3' AGGGGGTGGGAGGGTAGAGTGG 83990
                                             TA TCGAC
                    AGGG GTGGGA GGGT GG
                    TCCC CACCCT CCCA CC
                        TCTCA
GAM3715 C11orf9 3' GGGAGTGGGATGGGTGTCG 83991
                    GGGAGTGGGAT GGGT TCG
                    CCCTCACCCTA CCCA AGC
                        _ C
GAM3715 DGKD
            3' GGGAGTGGGATGGGTCG
                                 83992
                                          A T
                    GGGAGTGGGAT GGGT CG
                    CCCTCACCCTA CCCA GC
GAM3715 DKFZP434P0111 3' AGGAGTGGGATGGCAGTAGG 83993
                                             AG TCGAC
                    GGGAGTGGGAT GGT GG
                    TCCTCACCCTA CCG CC
                         TCAT
GAM3715 EPS15R 3' AGGGAGTGGGGTGGCCCGGAGG 78532
                                             ATAG
                                                   AC
                    AGGGAGTGGG GGTTCG GG
                    TCCCTCACCC CCGGGC CC
                       CA
                             CT
GAM3715 FLJ14107 5' GGGAGTGGGAGGGACG
                                  83994
                                          TA TTC _
                    GGGAGTGGGA GGG GAC G
                    CCCTCACCCT CCC CTG C
                        __ A
GAM3715 KIAA1205 3' AGGGGGTGGGGCGGGGGGGGAGA 83995
                                           A ATA TT ___
        ACGG
                      AGGG GTGGG GGG CGA CGG
                    TCCC CACCC CCC GCT GCC
                     C CG_ CC CTT
GAM3715 KIAA1887 5' AGGGGGTGGGAGGAGGGTCGGT 83996
                                          A T_ T AC
        GG
                     AGGG GTGGGA AGGGT CG GG
```

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TCCC CACCCT TCCCA GC CC
                      C CC _ CA
GAM3715 MCF2L 3' GGGAGTGGAGTGGAGGTGCG 83997
                                             ATA T
                    GGGAGTGGG GGGT CG
                    CCCTCACCT TCCA GC
                        CACC C
                                              T TTC C
GAM3715 NR6A1 3' AGGGAGTGGGAAGGAGGAAGG 83998
                    AGGGAGTGGGA AGGG GA GG
                    TCCCTCACCCT TCCT CT CC
                         _ C__ T
GAM3715 NR6A1
             3' AGGGAGTGGGAAGGAGGAAGG 83998
                                              T TTC C
                    AGGGAGTGGGA AGGG GA GG
                    TCCCTCACCCT TCCT CT CC
                         СТ
GAM3715 NR6A1 3' AGGGAGTGGGAAGGAGGAAGG 83998
                                             T TTC C
                    AGGGAGTGGGA AGGG GA GG
                    TCCCTCACCCT TCCT CT CC
                         _ C__ T
GAM3715 P2RX5 3' GGGAGTGGGCTGGAACCAA 83999
                                            ATA TT
                    GGGAGTGGG GGG CGA
                    111111111 111 111
                    CCCTCACCC CCT GTT
                        GA_ TG
GAM3715 SMARCF1 3' AGAGGGTGGGGTAGGGTCC 84000
                                             Α
                    AGGG GTGGG TAGGGTTC
                    TCTC CACCC ATCCCAGG
                      C C
GAM3715 SMARCF1 3' AGAGGGTGGGGTAGGGTCC 84000
                    AGGG GTGGG TAGGGTTC
                    TCTC CACCC ATCCCAGG
                      C
GAM3715 SMARCF1 3' AGAGGGTGGGGTAGGGTCC 84000
                    AGGG GTGGG TAGGGTTC
                    TCTC CACCC ATCCCAGG
                      C C
GAM3715 THEA
            3' GGGGTGGCTGTGTTCGACGG 84001
                                          A GATAGG
                    GGG GTGG
                              GTTCGACGG
                    CAAGCTGCC
                    CCC CACC
                      _ GACA_
                                              _ A TC
GAM3715 TRIM28 3' GGGAGTGGGGATGGGGTGACAG 84002
                    GGGAGTGGG AT GGGT GACGG
```

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CCCTCACCC TA CCCA CTGTC
                        CC
                                                A GGT __
GAM3715 LOC113230 3' GGGAGTGGGGCAATCGAGGCGG 84003
                     GGGAGTGGG TAG TCGA CGG
                     CCCTCACCC GTT AGCT GCC
                        C ___ CC
GAM3715 LOC149466 3' AGGGAGTGGGGAGGGTCTAA 84004
                                               ΑT
                                                   CG
                     AGGGAGTGGG AGGGTT A
                     TCCCTCACCC TCCCAG T
                            ΑT
GAM3715 LOC196955 3' AGGGGCTGGGATAGGAGTT 84005
                                            AG
                     AGGG TGGGATAGG GTT
                     TCCC ACCCTATCC CAA
                      CG
                            Т
GAM3715 LOC254643 3' AGGCAGTGGGATGGGGTT 84006
                                           G
                                               Α
                     AGG AGTGGGAT GGGTT
                     TCC TCACCCTA CCCAA
                      G
                          С
GAM3715 LOC91445 3' GGGAGTGGGAGGGAG
                                    84007
                                            TA TTC C
                     GGGAGTGGGA GGG GAG
                     CCCTCACCCT CCC CT C
GAM3716 KIT
           3' TTTGCCTTTTATATTG 84010
                                      G TTTGTT
                                 TATTG
                     TTTGCC TTTA
                     AAACGG AAAT
                                 ATAAC
                       Α
GAM3717 AKAP13 3' TGACAAAATGAGATACTAT 84013
                     TGACAAAGT AGGTA TAT
                     ACTGTTTTA TCTAT ATA
                        C
GAM3717 AKAP13 3' TGACAAAATGAGATACTAT 84013
                     TGACAAAGT AGGTA TAT
                     ACTGTTTTA TCTAT ATA
                        C G
GAM3717 AKAP13 3' TGACAAAATGAGATACTAT 84013
                     TGACAAAGT AGGTA TAT
                     ACTGTTTTA TCTAT ATA
                        C G
GAM3717 DNMT2 3' AAAATACAGTAATATAAATT 84014
                                           Α
```

AAAGTA GGTAATATAAATT

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G
GAM3717 CHL1 3' TGACAAAGATAAGGTAAC 84015
                     TGACAAG TAAGGTAAT
                     ACTGTTTC ATTCCATTG
                        Т
GAM3717 FOXP1 3' ACAAAGAAAGAATATAAATT 84016
                                          T T
                     ACAAAG AAGG AATATAAATT
                     TGTTTC TTTC TTATATTTAA
GAM3717 LOC220477 5' GACAAGGTGGCATATAAATT 84017
                                            A AA A
                     GACAA GT GGTA TATAAATT
                     CTGTT CA CCGT ATATTTAA
GAM3717 LOC51077 3' ACAAAGTGATATCATAAATT 84018
                                            AA A
                     ACAAAGT GGTA TATAAATT
                     TGTTTCA CTAT GTATTTAA
                       __ A
GAM3718 BCL7A 3' TGAGAAGTGACGCCGTTCTG 84021
                                            AG G GA
                     TGAGAAGT CGTTG CTG
                     ACTCTTCA GCG GC GAC
                        CT _ AA
                                          T_ C G
GAM3718 GLS
            3' TGAGAAGAGAGGCTGGAC 84022
                     TGAGAAG AG GT TGGAC
                     ACTCTTC TC CG ACCTG
                       TC _ _
GAM3718 IL1F5 3' GAGGACCGTGGACTGA
                                       AAGTA G
                                 84023
                     GAG GC TGTGGACTGA
                     CTC TG GCACCTGACT
                      C______
             3' TGAGCAGTGCAGGACTGAA 84024 A A TGT
GAM3718 MLPH
                     TGAG AGT GCG GGACTGAA
                     ACTC TCA CGT CCTGACTT
                      G _ _
GAM3718 PLD2
            3' GAGAAGTGGTTTGCACTG 84025
                                          AGC G G
                     GAGAAGT GTTG ACTG
                     CTCTTCA CA AC TGAC
                       C__ A G
GAM3718 SLC2A1 3' TGAGAGGTACGTGTAAGGGACT 84026
                                             AG_
        G
                     TGAGA GTA CGTGT GGACTG
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TTTTAT TCATTATATTTAA

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ACTCT CAT GCACA CCTGAC
                      C _ TTC
GAM3718 CYYR1 3' GAGATGGTGTGGACTGAA 84027 AGTAGC
                    GAGA GTGTGGACTGAA
                    CTCT CACACCTGACTT
                      AC
GAM3718 DKFZP434F0318 3' TGGGAAGGGTGCGGACAGA 84028 A TAGC
                                                     Т
                    TG GAAG GTGTGGAC GA
                    AC CTTC CACGCCTG CT
                     CC
                            Т
GAM3718 EPS8R3 3' TGAGAAGGAGAGGGACTGAAC 84029
                                           T CGTGT
                    TGAGAAG AG GGACTGAAC
                    ACTCTTC TC CCTGACTTG
                       C TC
GAM3718 EPS8R3 3' TGAGAAGGAGGGACTGAAC 84029
                                           T CGTGT
                    TGAGAAG AG GGACTGAAC
                    ACTCTTC TC CCTGACTTG
                       C TC
GAM3718 FLJ10374 5' TGAGAAATGGTTAGGCTG 84030
                                          AGC GT A
                    TGAGAAGT GT GG CTG
                    ACTCTTTA CA CC GAC
                       C__ AT _
GAM3718 FLJ12704 3' TGAGAAGTGGTCGTGAGGAC 84031
                                           AG T
                    TGAGAAGT CGTG GGAC
                    ACTCTTCA GCAC CCTG
                       CCA T
GAM3718 FLJ13433 3' GAAAATGTGGACTGA
                                       TAGC
                                 84032
                    GAAG GTGTGGACTGA
                    CTTT TACACCTGACT
GAM3718 FLJ13909 5' TGAGGTCTTGTGGACTG 84033
                                        AA AGCG
                    TGAG GT TGTGGACTG
                    ACTC CA ACACCTGAC
                      __ GA__
GAM3718 HT002 3' TGGGAAGCAGCGGCCTGGA 84034 A
                                             _ G
                    TG GAAGTAGCG T TGGA
                    11 111111111 1 1111
                    AC CTTCGTCGC G ACCT
                     С
                         СG
GAM3718 KIAA0285 3' GAGTAGTGTGGACAGGA 84035 A GC
                                               T_
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GA GTA GTGTGGAC GA

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CT CAT CACACCTG CT
                            TC
GAM3718 KIAA0601 3' GAGAGGTGGCACAAACTGAAC 84036 A A GT TG
                     GAGA GT GC G GACTGAAC
                     CTCT CA CG T TTGACTTG
                      C C GT
GAM3718 KIAA1522 3' GAGGAGTAAACTGGACTG 84037
                                          A CGTG
                     GAG AGTAG TGGACTG
                     CTC TCATT ACCTGAC
                      C TG
GAM3718 MGC14288 5' TGAGGGTAGCGTCCCTGGAC 84038
                                                  G__
                                             AA
                     TGAG GTAGCGT TGGAC
                     1111 1111111 11111
                     ACTC CATCGCA ACCTG
                           GGG
                                             C _ _
GAM3718 SP329 5' TGAGAAGCAGTGTTGTGA 84039
                     TGAGAAGTAG GT GTG GA
                     ACTCTTCGTC CA CAC CT
                         A A A
GAM3718 LOC126961 3' TGGAGGTGGCGCGGGGACTGAA 84040 A A A T
         С
                     TG GA GT GCGTG GGACTGAAC
                     AC CT CA CGCGC CCTGACTTG
                      CCC
GAM3718 LOC145376 3' GAAGCGTATGTGGGTTGAA 84041
                                             AGC
                                                  AC
                     GAAGT GTGTGG TGAA
                     CTTCG TACACC ACTT
                       CA
                            CA
GAM3718 LOC146224 5' TGAGCAGTGGCTCCAAACTGA 84042 A A GTG GG
                     TGAG AGT GC T ACTGA
                     ACTC TCA CG G TGACT
                      G C AG TT
GAM3718 LOC154877 3' TGATGAGTCAGTGGACTGAA 84043
                                            GA AGCGT
                     TGA AGT GTGGACTGAA
                     ACT TCA CACCTGACTT
                      AC GT
GAM3718 LOC155438 3' TGGGAAGTAGCTGTGGA 84044 A
                                              G
                     TG GAAGTAGC TGTGGA
                     AC CTTCATCG ACACCT
                      С
GAM3718 LOC257395 3' TGGAGGTGGCGCGGGGACTGAA 84040 A A A T
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TG GA GT GCGTG GGACTGAAC

С

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AC CT CA CGCGC CCTGACTTG
                      _{\rm C} C C
GAM3718 LOC93496 3' TGAGAAGTGGTGTTGTGA 84045
                                             AGC GGAC
                     TGAGAAGT GTGT TGA
                     ACTCTTCA CACA ACT
                        C__ AC__
GAM3719 TRHDE 3' ATAATGCCCATCCTAGGT 84048
                                            ATTGA A
                     ATAATGCCTA TCTA GT
                     TATTACGGGT GGAT CA
GAM3719 KIAA0022 3' TAATGCCTGCATTTTCAGTAC 84049
                                             A GATCTA
                     TAATGCCT ATT AGTAC
                     ATTACGGA TAA
                                   TCATG
                        CG AAG
GAM3719 KIAA1724 3' TGCCTATTTTATCCAAGT 84050
                                          AG
                     TGCCTA TT ATCTAAGT
                     ACGGAT AA TAGGTTCA
                       ΑА
                                            CTAAT T
GAM3719 MGC10765 3' ATGCTGGATGACCAAGTAC 84051
                     ATGC TGA CTAAGTAC
                     TACG ACT GGTTCATG
                       ACCT_ _
GAM3719 LOC90509 3' CAATGCCTGGATTTAAGT 84052
                                            AATT C
                     TAATGCCT GAT TAAGT
                     GTTACGGA CTA ATTCA
                        C___ A
                                            C ATA
GAM3720 CD3Z 3' TGTTGCGTCTTCCTGCGA 84055
                     TGTTGCGTCT CC GTGA
                     ACAACGCAGA GG CGCT
                         A A__
GAM3720 AP4S1 3' TGGTGTGTCTCCCATACTG 84056 T C
                                                G
                     TG TG GTCTCCCATA TG
                     11 11 111111111111111
                     AC AC CAGAGGGTAT AC
                      CA
                            G
GAM3720 DKFZp434A171 3' TGTTGCTCTTCCTCTGAAG 84057 G C ATAG
                     TGTTGC TCT CC TGAAG
                     ACAACG AGA GG ACTTC
                       _ A AG
GAM3720 FLJ14957 3' TGTTGCGTCCTCAGAA
                                  84058
                                            CC TAGT
                     TGTTGCGTCT CA GAA
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ACAACGCAGG GT CTT
GAM3720 MGC17330 3' TGTTGCGCTCCGTCAGGAAG 84059
                                            T CA T
                     TGTTGCG CTCC TAG GAAG
                     ACAACGC GAGG GTC CTTC
                       _ CA _
GAM3720 MGC26914 3' TGCACCCTCTCATGGTGAAG 84060
                                            GT_ C A
                     TGC CTC CAT GTGAAG
                     ACG G AG GTA CACTTC
                      TGGA C
GAM3720 MLLT10 3' TGTTGCGTTTCTTCATAG 84061
                                           СС
                     TGTTGCGT TC CATAG
                     ACAACGCA AG GTATC
                        A AA
GAM3720 SDC3 3' TGTTGGGTCTCCCACCTG 84062
                                         С
                                              AG
                     TGTTG GTCTCCCAT TG
                     ACAAC CAGAGGGTG AC
                       С
                           G_
GAM3720 LOC150759 3' GTCTGCCACTGTAGTGAAG 84063
                                           C _
                     GTCT CCAT AGTGAAG
                     CAGA GGTG TCACTTC
                      C ACA
GAM3720 LOC151323 3' GTCTGCCACTGTAGTGAAG 84063
                                           C ___
                     GTCT CCAT AGTGAAG
                     CAGA GGTG TCACTTC
                      C ACA
GAM3720 LOC158527 3' TGAGTCTTTCATAGTGAAG 84064 C CC
                     TG GTCT CATAGTGAAG
                     AC CAGA GTATCACTTC
                     T AA
GAM3720 LOC200399 3' GTCTGCCACTGTAGTGAAG 84063
                                           C __
                     GTCT CCAT AGTGAAG
                     CAGA GGTG TCACTTC
                      C ACA
                                             CG ACTC
GAM3721 CETN1 3' TGAGCTCCGTAAGTTTGTAAG 84067
```

A_ AA__ GAM3721 DNASE1L3 5' TGGCTTCAAGACTCTGT 84068 A C CGA TG GCT CG AGACTCTGT || ||| || ||||||||

TGAGCTCCG AAG TGTAAG

ACTCGAGGC TTC ACATTC

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AC CGA GT TCTGAGACA
                     _ A ___
GAM3721 RAX
            3' TGAGGTCCGCGAAGTGC 84069
                                       С
                                           ACTC
                    TGAG TCCGCGAAG TGT
                    ACTC AGGCGCTTC ACG
                      C
GAM3721 SCRT1 3' GAGTTCCGCGAAGGCTGC 84070
                                         С
                                             ACT
                    GAG TCCGCGAAG CTGT
                    CTC AGGCGCTTC GACG
                          С
GAM3721 WISP1 3' CTCTCAAGGCTCTGTAAG 84071
                                        CG G A
                    CTC C AAG CTCTGTAAG
                    GAG G TTC GAGACATTC
                     A C
                                        GC AC
GAM3721 CALN1 3' TGAGCTCCTGAAGTCTA 84072
                    TGAGCTCC GAAG TCTG
                    ACTCGAGG CTTC AGAT
                       A_ __
GAM3721 CLDN1 5' TGGGCCCCGCGGAGGAAGTTAA 84073 A A ACTCTG
                     TG GCTCCGCG AG TAAG
        G
                    AC CGGGGCGC TC
                                   ATTC
                         C CTTCA
GAM3721 DKFZP434J193 3' AAGCTAGACTCTGTAA
                                           CCGCGA
                                   84074
                    GAGCT AGACTCTGTAA
                    TCTGAGACATT
                    TTCGA
GAM3721 FLJ12505 5' GAGCTCCGCGGAGGCTCC 84075
                                            A A
                    GAGCTCCGCG AG CTCT
                    CTCGAGGCGC TC GAGG
                        CC
GAM3721 KIAA1941 3' TGAGCTCCGTGAAGCAGCTGAA 84076
                                             C ACT T
        G
                     TGAGCTCCG GAAG CTG AAG
                    ACTCGAGGC CTTC GAC TTC
                        A GTC _
GAM3721 MGC10200 5' TGAGACGGGACTCTGTAAG 84077
                                           CTCC AA
                    TGAG GCG GACTCTGTAAG
                    ACTC TGC CTGAGACATTC
                        _ C_
GAM3721 MGC24009 3' TGAGCTTCTAATTTTCTGTAAG 84078
                                            CCGCG GAC
```

TGAGCT AA TCTGTAAG

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ACTCGA TT AGACATTC
                       AGA__ AAA
GAM3721 LOC136345 3' TGAGCTCCTGGAGGTGACTC 84079
                                              GC A
                     TGAGCTCC GA GACTC
                     ACTCGAGG CT CTGAG
                        AC CCA
                                               AA_ _
GAM3721 LOC148018 3' AGCTCCGCGGAGGACCAGCTG 84080
                     AGCTCCGCG GACT CTG
                     TCGAGGCGC CTGG GAC
                        CTC TC
GAM3721 LOC155032 5' TGAGCTCCTGGAGGTGACTC 84079
                                              GC A
                     TGAGCTCC GA GACTC
                     ACTCGAGG CT CTGAG
                        AC CCA
GAM3722 IL1RAP 3' ATATATCACAGTTCTTTGT 84083
                                           AG C
                     GTATATCACA TCT TGT
                     TATATAGTGT AGA ACA
                         CA A
GAM3722 LARGE 3' CCTTGTCCAAGGTCTCTGT 84084
                                         GTATA A
                     CC TC CAAG TCTCTGT
                     GG AG GTTC AGAGACA
                     AAC__ C
                                         GTATA A _
GAM3722 LARGE 3' CCTTGTCCAAGGTCTCTGT 84084
                     CC TC CAAG TCTCTGT
                     GG AG GTTC AGAGACA
                     AAC__ C
GAM3722 CYP2S1 3' CCTCGTATGTCCAAAGTCTCTG 84085 C A AC
        Т
                     CC CGTAT TC AAGTCTCTGT
                     GG GCATA AG TTCAGAGACA
                     A C GT
GAM3722 DJ37E16.5 3' CCCCAGAGCATCACAAGTCTTT 84086
                                             TΑ
                                                    С
        GT
                      CCCCG TATCACAAGTCT TGT
                     GGGGT GTAGTGTTCAGA ACA
                       CTC
GAM3722 FLJ00024 5' CCCACGATGGTGCAGGTCTCTG 84087
                                            _ TATATCA A
        Т
                     CCC CG
                            CA GTCTCTGT
                         GGG GC
                             GT CAGAGACA
                      T TACCAC_ C
GAM3722 FLJ20203 3' CATCCATCTACAGGTCTCTGT 84088
                     CGT TATC ACA GTCTCTGT
```

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GTA GTAG TGT CAGAGACA
                     GAC
GAM3722 FLJ32865 3' CATTCTCACAAGTTTCTGT 84089 ATA C
                    CGT TCACAAGT TCTGT
                    GTA AGTGTTCA AGACA
                     AG
GAM3722 KIAA0420 3' ACCTGGGCATGGGTCTCTGT 84090 CC_ ATCACAA
                    ACC GTAT GTCTCTGT
                    TGG CGTA CAGAGACA
                     ACC CC
GAM3722 KIAA0893 3' GTAGTCTTAAGTCTCTGT 84091 TA AC
                    GTA TC AAGTCTCTGT
                    CAT AG TTCAGAGACA
                     C AA
GAM3722 KIAA1045 3' CCCAACCCCATGAGTCTCTGT 84092 TATA CA
                    CCCG TCA AGTCTCTGT
                    GGGT GGT TCAGAGACA
                      TGG_ AC
GAM3722 KIAA1280 5' CCGTGTCTCCCCACCTCTGT 84093
                                          ATA A AG
                    CCGT TC CA TCTCTGT
                    GGCA AG GT GGAGACA
                     CAG GG
GAM3722 LOC112840 3' ACCCCTGTATTTATCTTCTGT 84094
                                           _ ATCACAA _
                    ACCCC GTAT GTCT CTGT
                    TGGGG CATA
                              TAGA GACA
                      A AA
                              Α
GAM3722 LOC196047 5' CCCTGTGTACATGTGTCTCTGT 84095 C CACAA
                    CCC GTATAT GTCTCTGT
                    GGG CATGTA CAGAGACA
                     ACA CA
GAM3722 LOC203297 5' CCCACGATGGTGCAGGTCTCTG 84087
                                            _ TATATCA A
                    CCC CG CA GTCTCTGT
                    GGG GC GT CAGAGACA
                     T TACCAC C
GAM3722 LOC221178 3' CCTGGTATTCATAAGTCTCTGT 84096 CC A C
                    CC GTAT TCA AAGTCTCTGT
                    GG CATA AGT TTCAGAGACA
                     AC _ A
GAM3722 LOC222112 3' CCTGTGTATTGACAAGTCT 84097 C A C_
                    CC GT TAT ACAAGTCT
```

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GG CA ATA TGTTCAGA
                    A C AC
GAM3722 LOC257354 3' ACCTGGGCATGGGTCTCTGT 84090 CC ATCACAA
                   ACC GTAT GTCTCTGT
                   TGG CGTA CAGAGACA
                    ACC CC
                                        CAA TC
GAM3722 LOC257463 3' CATATATCAGGCTTCTGT 84098
                   CGTATATCA G TCTGT
                   GTATATAGT C AGACA
                       C GA
GAM3723 OPTN 5' GAGAGAACTCCCGACCGGG 84101 C ACACGA
                   GAGAG AC CGACCGGG
                   CTCTC TG GCTGGCCC
                     T AGG
GAM3723 SORCS1 3' CAGAGAGCACACATGAAATCAC 84102
                                          C CG C
        TGGG
                      TAGAGAGCACACA GA AC GGG
                   GTCTCTCGTGTGT CT TG CCC
                        A TTAG A
GAM3723 ARTN 5' GAGAGGCACGGAAACCGGG 84103
                                        CACA AC
                   GAGAG CACG GACCGGG
                    CTCTC GTGC TTGGCCC
                     C CT
GAM3723 FGF19 5' GAGGCTGGGCGGCGACCGGG 84104 A ACACA A
                   GAG GC CG CGACCGGG
                   CTC CG GC GCTGGCCC
                    _ ACCC_ C
GAM3723 FLJ10921 3' TAGAGAGCAGCATGTGGCACAC 84105
        Α
                    TAGAGAGCA CACACG
                   ATCTCTCGT
                              GTGTGT
                       CGTACACC
GAM3723 KIAA0894 3' TAGAGAGCACACACAGTCCAAC 84106
                                            GA C
        GG
                     TAGAGAGCACACAC CGAC GG
                   ATCTCTCGTGTGTG GTTG CC
                         TCAG
```

GAM3723 KIAA1881 3' GAGAGCACGGGGCCCGGCGGCC 84107 ACA___ A A GGG GAGAGCAC CG CG CCGGG

|||||||| || || |||||
CTCTCGTG GC GC CC
CCCCGG C C
GAM3723 LOC120448 5' GAGAGCACAGCAGGCCGG 84108 _ CGACGA
GAGAGCACA CA CCGG

||||||||| |||

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CTCTCGTGT GT GGCC
                       C CC_
GAM3723 LOC138128 5' AGAGCCACCGCGGCGACCGGG 84109
                                             A A A
                    AGAGC CAC CG CGACCGGG
                    TCTCG GTG GC GCTGGCCC
                      _ GC C
GAM3723 LOC139174 5' TAGAGAGCATACTCGGAGTCAT 84110
                                            C A ACGACC
        GGG
                      TAGAGAGCA AC CG GGG
                    III
                    ATCTCTCGT TG GC
                                    CCC
                       A A CTCAGTA
GAM3723 LOC196985 5' TAGGAGCACACACGTGACGGG 84111
                                                 AC C
                    TAG GAGCACACG GAC GGG
                    ATC CTCGTGTGTGC CTG CCC
GAM3724 DPYD 5' GGCTGTAACGCCATTGGCA 84114
                                          ACA
                    GGCTGTGA CATTGGCA
                    CCGACATT GTAACCGT
                       GCG
GAM3724 ITGA1 3' TCAGGGACTGTCTCATTGGCA 84115 A
                                             GAACA
                    TCA GGGCTGT CATTGGCA
                    AGT CCTGACA GTAACCGT
                         GA
GAM3724 PGK1
            3' GGGCTGTGCACAGGAAC 84116
                                         AA TT
                    GGGCTGTG CACA GGC
                    CCCGACAC GTGT TTG
                        CC
GAM3724 SLA2 3' TCAAGGGCTGGATTTGG 84117
                                         T ACACA
                    TCAAGGGCTG GA TTGG
                    AGTTCCCGAC CT AACC
                        _ A__
GAM3724 TACC1 3' TCCAGGGCTGTTGCATTGGCA 84118 A
                                             GAACA
                    TC AGGGCTGT CATTGGCA
                    AG TCCCGACA GTAACCGT
                     G
                         AC_{-}
GAM3724 TCTA
            3' CCAGGGGCTGTGAATAAC 84119 A
                                            CACAT
                    TCA GGGCTGTGAA TGGC
                    GGT CCCGACACTT ATTG
                     С
GAM3724 TNFRSF13C 3' TCAAGGGCTGTCAAAGATGG 84120
                                              G CACAT
```

TCAAGGGCTGT AA TGG

```
AGTTCCCGACA TT ACC
                         G TCT
GAM3724 TRPM2 3' AGGGGTGCCAGGGCACATTGGC 84121 C GAA
        Α
                     AGGG TGT CACATTGGCA
                     TCCC ACG GTGTAACCGT
                      C GTCCC
GAM3724 COTL1 3' GGGCTGTGGACACAGGG
                                   1681
                                           A TT
                     GGGCTGTG ACACA GG
                     1111111 11111 11
                     CCCGACAC TGTGT CC
                        C C
GAM3724 DKFZp762P2111 3' TCAAAGTTTGAGCACATTGG 84122
                                                GCTG A
                     TCAAGG TGA CACATTGG
                     AGTTTC ACT GTGTAACC
                       AA C
GAM3724 FLJ20291 3' AGGAGCCATGGAGCATATTGGC 84123
                                            _ AA_ C
        Α
                     AGG GCTGTG CA ATTGGCA
                     TCC CGGTAC GT TAACCGT
                      Т
                         CTC A
GAM3724 KIAA0794 3' ACTGATGAACACGTTGGCA 84124
                                              Α
                     GCTG TGAACAC TTGGCA
                     TGAC ACTTGTG AACCGT
GAM3724 MGC13251 5' TCAGGGGCTGCGGCAGCCGGC 84125
                                                  AA CA
                                              Α
                     TCA GGGCTGTG CA TTGGC
                     AGT CCCGACGC GT GGCCG
                      С
                          CC C_
GAM3724 MGC3101 3' AAGGGCCGTGGGCAGGC
                                             AA CATT
                                    84126
                     AAGGGCTGTG CA GGC
                     TTCCCGGCAC GT CCG
                         CC
GAM3724 MGC4643 3' TCCTAGGTTGTGAACATATTGG 84127 AA C
                                                   C
                     TC GGG TGTGAACA ATTGG
                     AG TCC ACACTTGT TAACC
                      GA A
                             Α
GAM3724 PKNOX2 3' TCCAGGGCTGTGGATAGC 84128 A
                                              AACACAT
                     TC AGGGCTGTG
                                   TGGC
                     Ш
                     AG TCCCGACAC
                                   ATCG
                      G
                          CT_{-}
GAM3724 ZNF347 3' AGGATGGAGTGCATTGGCA 84129
                                           C T ACA
```

AGGG TG GA CATTGGCA

```
TCCT AC CT GTAACCGT
                     _ _ CAC
GAM3724 LOC150605 5' GGGCTGTGATGCACCCGTTGG 84130
                                          A A
                   GGGCTGTGA CAC TTGG
                   CCCGACACT GTG AACC
                      AC GGC
GAM3724 LOC150848 3' AGAGTTGTGAACAAGC
                                84131
                                      C CATT
                   AGGG TGTGAACA GGC
                   TCTC ACACTTGT TCG
GAM3725 DDOST 5' ATCGCGGCTCGTGCCCGTGG 84134
                                         TC __ _
                   ATCGCGG CGT TCG GG
                   TAGCGCC GCA GGC CC
                      GA CG A
GAM3725 DLK1 5' TCGCGGTCCCGGGAGCGG 84135
                                        GTT
                   TCGCGGTCC CGGGAGCGG
                   AGCGCCAGG GCCCTCGCC
GAM3725 DYRK2 5' TCGGGTAGGCGGCGGGAGCGG 84136 C CC T
                   TCG GGT GT CGGGAGCGG
                   AGC CCA CG GCCCTCGCC
                    _ TC CC
GAM3725 ENPP1 5' ATCGCGGCCGTTCCCCGCCGG 84137 T
                                             GGGA
                   ATCGCGG CCGTTC GC GG
                   TAGCGCC GGCAAG CG CC
                        GGG_ G
GAM3725 G6PD 5' ATCGGCGGGGGGGGGGGGGG 84138
                                        TCCGTT A
                   ATCG CGG CGGG GCGG
                   TAGC GCC GCC CGCC
                    C CCC__ C
GAM3725 GUCY1A2 5' ACCGCGGTCGGCGGGGCGG 84139 CGTT A
                   ATCGCGGTC CGGG GCGG
                   TGGCGCCAG GCCC CGCC
                      CC__ _
GAM3725 JPH3
           5' TCGCGGCCGCCGGCG 84140 T T GGA
                   TCGCGG CCGT CG GCG
                   AGCGCC GGCG GC CGC
GAM3725 MID1 5' TCGCAGTCTTCAGAGCGG 84141
                                      CG G
```

TCGCGGTC TTCGG AGCGG

AGCGTCAG AAGTC TCGCC

GAM3725 NFRKB 5' TCGCGGCCGTGACGGCGG 84142 T TC GA TCGCGG CCGT GG GCGG AGCGCC GGCA CT CGCC _ __ GC GAM3725 OCLN 5' GCGGCCCGAGAGGCGG TTC A 84143 GCGGTCCG GGG GCGG CGCCGGC CTC CGCC T__ _ GAM3725 THBS1 5' CGCGGCGGCCGGGAGCGG 84144 TC TT CGCGG CG CGGGAGCGG GCGCC GC GCCCTCGCC CG T TTC A GAM3725 TRC8 5' CCGCGGCCGGGGGCG 84145 TCGCGG CCG GGG GCG GGCGCC GGC CCC CGC GAM3725 ZNF174 5' CGCGGTCCCTGGGAGTGG 84146 G C C CGCGGTCC TT GGGAG GG GCGCCAGG GA CCCTC CC _ _ A GAM3725 ZNF216 5' CCGCGGGCCGGGAGCG 84147 TCC T TCGCGG GT CGGGAGCG GGCGCC CG GCCCTCGC GAM3725 CECR2 5' CGCGGTCCTCGGCGGGGGGGG 84148 GTT A CGCGGTCC CGGG GCGG GCGCCAGG GCCC CGCC AGCC C GAM3725 CNNM2 5' TCTCGGCCCACGGGGGGGG 84149 G TT A TC CGGTCCG CGGG GCGG AG GCCGGGT GCCC CGCC __ C GAM3725 DKFZp586G0123 5' CGGTGGCTTGGGAGCGG 84150 CC C CGGT GTT GGGAGCGG GCCA CGA CCCTCGCC C_{-} A GAM3725 FLJ20374 5' CGCGGGCGTGGGAGCG 84151 TC TC CGCGG CGT GGGAGCG

GCGCC GCA CCCTCGC

С

GAM3725 HTATSF1 5' ATCGCGGCCGCTCGGCG 84152 T GGA

ATCGCGG CCGTTCG GCG

TAGCGCC GGCGAGC CGC

GAM3725 KIAA0513 3' TCACGGTCTGGCCAGCGG 84153 CGTTC G_

TCGCGGTC GG AGCGG

AGTGCCAG CC TCGCC

A GG

GAM3725 KIAA0923 5' TCACGGCCCCGGGAGCGG 84154

TCGCGGTCC TCGGGAGCGG

GT

CGGG

AGTGCCGGG GGCCCTCGCC

GAM3725 MGC21945 5' TCGCGGTCCTCCCAGAGCGG 84155 G G

TCGCGGTCC TTC GGAGCGG

AGCGCCAGG AGG TCTCGCC

_ G

GAM3725 RAD51 5' CGCGGTCCGCCAGCG 84156 CGGG

CGCGGTCCGTT AGCG

GCGCCAGGCGG TCGC

GAM3725 RAD51 5' CGCGGTCCGCCAGCG 84156

CGCGGTCCGTT AGCG

GCGCCAGGCGG TCGC

GAM3725 STAG1 5' TCGCCGGGGGTTCGGGAGCGG 84157 _ TCC

TCGC GG GTTCGGGAGCGG

AGCG CC CAAGCCCTCGCC

G CC

GAM3725 LOC130497 3' TCGCGGCCCCGGGCG 84158 GTT GA

TCGCGGTCC CGG GCG

AGCGCCGGG GCC CGC

GAM3725 LOC164537 5' TCGCGGCCGGGGGCG 84159 T TTC A

TCGCGG CCG GGG GCG

AGCGCC GGC CCC CGC

GAM3725 LOC167517 5' TCGCGGCCCGTTTCCCGCGG 84160 CGGGA

TCGCGGTCCGTT GCGG

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AGGG
GAM3725 LOC257450 5' TCCCGGTCCGTCCATGGGCGG 84161 G
                                                   _ A
                     TC CGGTCCGTTCG GG GCGG
                     AG GCCAGGCAGGT CC CGCC
                           Α_
                      G
GAM3726 MTCP1 3' TTTAATGTGTTTATATT
                                  84164
                                            Т
                     TTTAATGTGTTT ATATT
                     AAATTACACAAA TATAA
GAM3726 KIAA1586 5' TTTAATGTGTTTATTATTGTAT 84165
                                               TA A
         TT
                      TTTAATGTGTTT TATT TATTT
                     AAATTACACAAA ATAA ATAAA
                          TA C
GAM3726 MGC4827 3' GTGTTTTTACTACATTT
                                   84166
                     GTGTTTT TATTATATTT
                     CACAAAA ATGATGTAAA
GAM3726 PPAP2A 3' TTTAATATGTATTATATT 84167
                                            Т
                     TTTAATGTGT TTATATT
                     AAATTATACA AATATAA
GAM3726 STRN
             3' TTAATGTGTTTTAACCAGATTT 84168
                                               T T
                     TTAATGTGTTTTA ATTA ATTT
                     AATTACACAAAAT TGGT TAAA
GAM3726 LOC157292 3' TTTAATGTGCTTAATATT 84169
                                              Т
                     TTTAATGTGTTT ATATT
                     AAATTACACGAA TATAA
                          Т
GAM3727 CASP3
             3' CATGTCTCTGCTCAGGCTCAAA 84172
                                             CCGCC AA
         CC
                      CATG GCTCA CTTAAACC
                     GTAC CGAGT GAGTTTGG
                       AGAGA CC
GAM3727 CASP3
             3' CATGTCTCTGCTCAGGCTCAAA 84172
                                             CCGCC AA
         CC
                      CATG GCTCA CTTAAACC
                     GTAC CGAGT GAGTTTGG
                       AGAGA CC
GAM3727 NEDD4
             3' ATACCCCAACAAACTTAAACC 84173
                                            G CT
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ATGCC CCG CAAACTTAAACC

AGCGCCGGGCAA CGCC

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TATGG GGT GTTTGAATTTGG
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_ T_ GAM3727 PTEN 5' TGCCGCCGCTTGGCTCTGGACC 84174 CAAA AA TGCCGCCGCT CTT ACC ACGGCGGCGA GAG TGG ACC ACC GAM3727 ROBO1 3' GCCACAACAACTTAAACC 84175 T_ GCCGC CAAACTTAAACC CGGTG GTTTGAATTTGG TT GAM3727 ROBO1 3' GCCACAACAACTTAAACC 84175 Т GCCGC CAAACTTAAACC CGGTG GTTTGAATTTGG TT GAM3727 E2IG4 3' CATGCCACTGCCCGCAGGAACT 84176 C A_ TΑ CATGCCGC GCTC AACTTA GTACGGTG CGGG TTGAAT A CGTCC GAM3727 GAL3ST2 5' GCCGCCGCTATCTCTGGACC 84177 CAAA AA GCCGCCGCT CTT ACC CGGCGGCGA GAG TGG TA__ ACC GAM3727 HSPC016 5' TGCCGCCGCTTCCCCAGACC 84178 CAAA A TGCCGCCGCT CTTA ACC ACGGCGGCGA GGGT TGG AG C GAM3727 MGC12538 3' GCTGCATCAAACTTGAAC 84179 C GC GC TCAAACTT AAC CG CG AGTTTGAA TTG ΑТ C GAM3727 MKRN1 3' GCCACACAAGGCTTAAACC 84180 ΤА GCCGC CAA CTTAAACC CGGTG GTT GAATTTGG T CC GAM3728 BCHE 3' TATGTTCTATAAAGGGTA 84183 G TATG CTGTAAAGGGTA ATAC GATATTTCCCAT AA GAM3728 CEACAM6 3' GTATGACTATTAGGAGGGTA 84184 AA GTATGGCTGT AGGGTA

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CATACTGATA TCCCAT
                          ATCC
GAM3728 FPRL1 3' ATATGACTCAAGGGTA
                                            GTA
                                 84185
                      GTATGGCT AAGGGTA
                      TATACTGA TTCCCAT
                         G
GAM3728 FRK
             3' GTAGGCCAAAGGGTA
                                  84186
                                         T GT
                      GTA GGCT AAAGGGTA
                      111 1111 11111111
                      CAT CCGG TTTCCCAT
GAM3728 IL20RA 3' TATGGCTGGGATCAAAGGG 84187
                      TATGGCTG TAAAGGG
                      ATACCGAC GTTTCCC
                         CCTA
                                           GGC _
GAM3728 LZTFL1 3' GTATTTTGCTAAAGGGTA 84188
                      GTAT TGT AAAGGGTA
                      CATA ACG TTTCCCAT
                        AA_ A
GAM3728 POLQ 3' GTAGGTGAAAGGGTA
                                         TCT
                                   84189
                      GTA GG TG AAAGGGTA
                      111 11 11 11111111
                      CAT CC AC TTTCCCAT
GAM3728 PPP6C 3' GTATATTGTAGAGGGTA 84190
                                           GC A
                      GTATG TGTA AGGGTA
                      CATAT ACAT TCCCAT
                        A C
GAM3728 PRKCN 3' TATGGCTGCTGTGAGGGTA 84191
                                               AA
                      TATGGCTGT AGGGTA
                      ATACCGACG TCCCAT
                         ACAC
GAM3728 TACC1 3' GTAGGTTGAAAGGGTA
                                         ТСТ
                                   84192
                      GTA GG TG AAAGGGTA
                      111 11 11 11111111
                      CAT CC AC TTTCCCAT
                       _ A _
GAM3728 TNFAIP1 3' GCATGGCTGGAAGCCAAGGGTA 84193
                                                 TA____
                      GTATGGCTG AAGGGTA
                      CGTACCGAC
                                  TTCCCAT
                         CTTCGG
GAM3728 TOMM22 3' GCATGGCTGCACTCTGGTA 84194
                                                 AAG_{-}
                      GTATGGCTGTA GGTA
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GAGA
GAM3728 XK 3' GTAGGTTGGAAAAGGGTA 84195 T C T
                    GTA GG TG AAAGGGTA
                    CAT CC AC TTTCCCAT
                     _ A CT
GAM3728 CED-6 3' GTTAGGTAAAGGGTA
                                84196 A CT
                    GT TGG GTAAAGGGTA
                    CA ATC CATTTCCCAT
GAM3728 FLJ20127 3' GTATGGCTCTGATCAAGAAGGG 84197
                                             _____ TA
                                                      Ш
        TAT
                      TATGGCT G AAGGGTA T
                    ATACCGA T TTCCCAT A
                       GACTAG TC
                                111
GAM3728 HEY2 3' GTATGGCTACCTTCAGGGT 84198
                                           AA
                    GTATGGCTGT AGGGT
                    CATACCGATG TCCCA
                        GAAG
GAM3728 HN1L 3' ATAAAGCTTTGTAGAGGGT 84199 T A
                    GTA GGCT GTA AGGGT
                    TAT TCGA CAT TCCCA
                     T AA C
GAM3728 KIAA0445 5' TATGGCTGTGGGACAAAGGGT 84200
                    TATGGCTGT AAAGGGT
                    ATACCGACA TTTCCCA
                        CCCTG
GAM3728 KIAA0537 3' GCATGGCCATTCAGAGGGTA 84201
                                             AA
                    GTATGGCTGT AGGGTA
                    CGTACCGGTA TCCCAT
                        AGTC
GAM3728 KIAA1001 3' GTGTGTTTGTAAAGAGGGTA 84202 A GC
                    GT TG TGTAA AGGGTA
                    CA AC ACATT TCCCAT
                     C AA TC
GAM3728 KIAA1724 3' GTCAGAAGTAAAGGGTA 84203 A CT
                    GT TGG GTAAAGGGTA
                    CA GTC CATTTCCCAT
                     _ TT
GAM3728 KIAA1910 3' GGAGCTACTTAAAGGGTA 84204 T __
                    A GGCTG TAAAGGGTA
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CGTACCGACGT CCAT

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C TCGAT ATTTCCCAT
                      C GA
GAM3728 KIAA1924 3' GTATAGCTGCTGCAGGGT 84205
                                              AA
                      GTATGGCTGT AGGGT
                     CATATCGACG TCCCA
                          ACG
GAM3728 MBLL39 3' GTATGGCTGAAAGAATA
                                   84206
                                            Т
                      GTATGGCTG AAAGGGTA
                      CATACCGAC TTTCTTAT
GAM3728 LOC149579 5' TATGGCTGTGGGACAAAGGGT 84200
                     TATGGCTGT AAAGGGT
                     ATACCGACA TTTCCCA
                         CCCTG
GAM3728 LOC163026 5' GTATGTAATAAAGGGTA 84207
                                            GCT
                     GTATG GTAAAGGGTA
                      CATAC TATTTCCCAT
                        AT_
GAM3728 LOC55908 3' GTAGGCATGAAAGGGTA
                                           T _ T
                                     84208
                      GTA GGC TG AAAGGGTA
                      CAT CCG AC TTTCCCAT
                       _ T _
GAM3728 LOC90155 5' GATAACTAAAGGGTA
                                   84209 T
                                             TΑ
                      G ATGGCTG AAGGGTA
                     C TATTGAT TTCCCAT
GAM3728 LOC92421 3' ATATTCTGTAAAGGGTA
                                           GG
                                    84210
                     GTAT CTGTAAAGGGTA
                      TATA GACATTTCCCAT
                       \mathsf{A}_{-}
GAM3729 CAPZA1 3' ATCACTCTTGTTTATAAATCAC 84213
                                                  TTTAGA
                     ATCACTTT GTTTAT CAC
                      TAGTGAGA CAAATA
                                      GTG
                            TTTA_
                         Α
GAM3729 CREB1 3' ATCACTTTGCTTTATTTGACA 84214
                                               AT A
                     ATCACTTTGTTT TTT GACA
                      TAGTGAAACGAA AAA CTGT
                          \mathsf{AT}_{-}
GAM3729 EGR1
             3' TCACTTTGTTTAAGCAAACAC 84215
                                               TTT
                     TCACTTTGTTTA TAGACAC
```

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AGTGAAACAAAT GTTTGTG
                         TC_
GAM3729 ERBB2 3' TCGCTTTTGTTCTTAGACAC 84216 A _ ATT
                    TC CTTT GTTT TTAGACAC
                    AG GAAA CAAG AATCTGTG
                     C A ___
GAM3729 IDS
           3' CAGCTTGTTTATTTTAGA 84217 C
                    CA TTTGTTTATTTTAGA
                    GT GAACAAATAAAATCT
                     С
GAM3729 NCAM2 3' CTTTGTTTGTTTAGACAC 84218
                                          ΑT
                    CTTTGTTT TTTAGACAC
                    GAAACAAA AAATCTGTG
                       С
GAM3729 OGN
            3' ACTTTGTTTCGAACGTAGACA 84219
                                           ATTT
                    ACTTTGTTT TAGACA
                    TGAAACAAA
                               ATCTGT
                        GCTTGC
GAM3729 OGN
            3' ACTTTGTTTCGAACGTAGACA 84219
                                           ATTT
                    ACTTTGTTT TAGACA
                    TGAAACAAA
                               ATCTGT
                        GCTTGC
GAM3729 OGN
            3' ACTTTGTTTCGAACGTAGACA 84219
                                           ATTT
                    ACTTTGTTT TAGACA
                    TGAAACAAA
                               ATCTGT
                        GCTTGC
GAM3729 SLC16A7 3' TCACTTTGTAGGATTAGGCA 84220
                                            TTATT A
                    TCACTTTGT TTAG CA
                    AGTGAAACA AATC GT
                        TCCT_ C
GAM3729 TGFBR1 3' ATCACTTTCTTTAGTAATAAGA 84221
                                            G TTTT__
        CA
                     ATCACTTT TTTA
                                   AGACA
                    TAGTGAAA AAAT
                                  TCTGT
                        G CATTAT
GAM3729 ZIC3
            3' ATCACCACTGTTTTAGACA 84222
                                           ATTT
```

ATCACT TTGTTT TAGACA

TAGTGG GACAAA ATCTGT

С

GAM3729 DKFZP566F2124 3' CTTTAACTTTTTAGACAC 84224 TTTA
CTTTG TTTTAGACAC

GAAAT AAAATCTGTG

TGA

GAM3729 FLJ10716 3' ACTTTGTTTATTAACA 84225 TTA

ACTTTGTTTATT GACA

TGAAACAAATAA TTGT

GAM3729 FLJ22601 3' ACATTTGTAAATATTTTAGACA 84226 _ T_

AC TTTGT TATTTTAGACA

TG AAACA ATAAAATCTGT

T TTT

GAM3729 KIAA0285 3' TCACCCTTATTTTAGA 84227 TTG

TCACT TTTATTTTAGA

AGTGG GAATAAAATCT

GAM3729 SLC19A3 3' TTTGTTTGTTTTAGACAC 84228 A

TTTGTTT TTTTAGACAC

AAACAAA AAAATCTGTG

С

GAM3729 SYNJ2 3' ACTTTGTTTATACTTACAC 84229 _ G

ACTITGTTTAT TITA AC

TGAAACAAATA GAAT TG

T G

GAM3729 TIP120A 3' CATTTTGAAGCTTTTAGACAC 84230 C TTTA

CA TTTG TTTTAGACAC

GT AAAC AAAATCTGTG

A TTCG

GAM3729 LOC146056 3' CCACTTTGTTTATGACA 84231 TTTA

TCACTTTGTTTAT GACA

GGTGAAACAAATA CTGT

GAM3729 LOC146517 3' ACTTTGTTTATAAGAC 84232 TTT

ACTTTGTTTAT AGAC

TGAAACAAATA TCTG

T_

GAM3729 LOC51339 5' ATCATTCCCGTTTTTAGACAC 84233 C_ ATT

ATCA TTTGTTT TTAGACAC

```
TAGT GGGCAAA AATCTGTG
                      AA
GAM3730 CSPG4 3' TGAATATATTATCCTATTGGC 84236
                                            ATG TA
                    TGAGTATATTAT CCT GC
                    ACTTATATAATA GGA CG
                         ___ TAAC
GAM3730 FCMD
             3' AGTATATCCTTCCTTAGC 84237
                                         ATATG
                    AGTATATT CCTTAGC
                    TCATATAG GGAATCG
                       GAA
GAM3730 RAP1A 3' AGTATATTATATATTTTAGC 84238
                                            CC
                    AGTATATTATG TTAGC
                    TCATATAATATA AATCG
                         AA
GAM3730 bA430M15.1 3' TGAATATATACCTTAG
                                  84239
                                          TATAT
                    TGAGTATAT GCCTTAG
                    ACTTATATA TGGAATC
GAM3730 BCDO2 3' TGAGTATATTGTGTGCTGC 84240
                                           ATA CTTA
                    TGAGTATATT TGC GC
                    ACTCATATAA ACG CG
                        CAC A
GAM3730 QKI
           3' TGAGTATTTATATGCACT 84241
                                       Α
                    TGAGTAT TTATATGC CT
                    ACTCATA AATATACG GA
                           Т
                                           GC CTC C
GAM3731 ROR2 3' ACCGTGTTCTGTACAATACTG 84244
                    ACCGTGTT GT CGA ACTG
                    TGGCACAA CA GTT TGAC
                       GA T__ A
            3' CACTGTGTAGCATTGATACTG 84245
                                         C T CTCC C
GAM3731 BACH
                    CAC GTGT GCGT GA ACTG
                    GTG CACA CGTA CT TGAC
                     A T A___ A
GAM3731 BIKE 3' GTGTTGCATGTTGATACTG 84246
                                          CTCC C
                    GTGTTGCGT GA ACTG
                    CACAACGTA CT TGAC
                        CAA_ A
```

5' GCTGTGTCCCTCTGACACTG 84247

GTTG GTCTC GACACTG

C C_

GAM3731 EREG

```
A AGA
GAM3731 FLJ23233 5' CACCGTGCCTTCCGGCGCT 84248 GCGTC ACA
                     CACCGTGTT TCCG CT
                     GTGGCACGG AGGC GA
                        A____ CGC
GAM3731 FLJ23584 3' GTGTGATCTCCGATGCT 84249
                                         TC
                                               CA
                     GTGT G GTCTCCGA CT
                     CACA C TAGAGGCT GA
                           AC
GAM3731 GOLGA2LY 3' CCAGTGCTGCGTCTTTGGCACT 84250
                                                  CCGA
        G
                     CC GTGTTGCGTCT CACTG
                     GG CACGACGCAGA GTGAC
                           AACC
                     Т
GAM3731 KIAA1843 3' ATGTGACATCTCCGACACTG 84251
                                           Т
                     GTGT GCGTCTCCGACACTG
                     TACA TGTAGAGGCTGTGAC
                      С
GAM3731 MGC3771 5' CATGTTGGTTTCCGACGCTG 84252
                                             СС
                     CGTGTTG GT TCCGAC CTG
                     GTACAAC CA AGGCTG GAC
                       _ A C
GAM3731 PTPRT 3' GTGCTGTGCCCGCACTG 84253
                                          C CT A
                     GTGTTG GT CCG CACTG
                     CACGAC CG GGC GTGAC
GAM3731 LOC158376 3' CACCGTGCACTCCGGCGCT 84254
                                             TGCGT ACA
                     CACCGTGT CTCCG CT
                     GTGGCACG GAGGC GA
                        T CGC
GAM3731 LOC169831 3' CCAGCACTGCGTCTCTGGCACT 84255 TG
                                                   CGA
        G
                     CC G TTGCGTCTC CACTG
                     11 | ||||||||
                     GG C GACGCAGAG GTGAC
                     T GT
                            ACC
GAM3731 LOC245727 5' CCAGTGCTGCGTCTCTGACACT 84256
                                                  С
        G
                     CC GTGTTGCGTCTC GACACTG
                     GG CACGACGCAGAG CTGTGAC
                     Т
                           Α
GAM3731 LOC257431 3' CCAGTGCTGCGTCTTTGGCACT 84250
                                                  CCGA
```

CC GTGTTGCGTCT CACTG

G

CGAC CAGGG CTGTGAC

```
GG CACGACGCAGA GTGAC
                      Т
                           AACC
GAM3731 LOC257447 3' CCAGTGCTGCGTCTCTGACACT 84256
                                                  С
        G
                     CC GTGTTGCGTCTC GACACTG
                     GG CACGACGCAGAG CTGTGAC
                      Т
GAM3731 LOC51198 3' GCATCGTTTCTGACACT 84257
                                           CG CC
                     GTGTTG TCT GACACT
                     CGTAGC AGA CTGTGA
                       AA
GAM3732 SLC22A5 3' TTCAATGGAGCATTTATTAT 84260
                                              CTGAAA
                     TTCAA TGGAGC ATTAT
                     AAGTT ACCTCG
                                  TAATA
                          TAAA
            3' AATTAAGCTGAAAATTATA 84261
GAM3732 XPR1
                                        G C
                     AAT GAGC TGAAAATTATA
                     TTA TTCG ACTTTTAATAT
                      Α _
GAM3732 FLJ32743 3' TTCAAAGGAAGAAATTAT 84262
                                           T CCT
                     TTCAAA GGAG GAAAATTAT
                     AAGTTT CCTT CTTTTAATA
GAM3732 GLP
            3' TTCAAATGGAGTAAATGAA 84263
                                            CC
                     TTCAAATGGAG TGAA
                     AAGTTTACCTC ACTT
                         ATTT
GAM3732 GOLGIN-67 3' TTCAAATGAAGTAAATGAA 84264
                                              CC
                     TTCAAATGGAG TGAA
                     AAGTTTACTTC ACTT
                         ATTT
GAM3732 KIAA0855 3' TTCAAATGAAGTAAATGAA 84264
                                             CC__
                     TTCAAATGGAG TGAA
                     AAGTTTACTTC ACTT
                         ATTT
GAM3732 TRIP-Br2 3' TTCAAATGGATTCTTTCCTATA 84265
                                             GC GAAAA
                     TTCAAATGGA CT TTATA
                     AAGTTTACCT GA GATAT
                         AA AAG__
GAM3732 LOC145900 3' TTCAAATGAAGTAAATGAA 84264
                                              CC__
                     TTCAAATGGAG TGAA
```

| | AAGTTTACTTC ACTT ATTT | |
|-------------------------|---------------------------------------|----------|
| GAM3732 OC145988 3' | TTCAAATGAAGTAAATGAA 84264 | CC |
| G/11/10/02 2001 10000 0 | TTCAAATGGAG TGAA | <u> </u> |
| | | |
| | AAGTTTACTTC ACTT | |
| | ATTT | |
| GAM3732 LOC153577 3' | TCAAGTGGTACAGAAAATTATA 84266 | A A CT |
| | TCAA TGG GC GAAAATTATA | |
| | | |
| | AGTT ACC TG CTTTTAATAT | |
| GAM2722 OC154002 5 | C A T_ AAACGGAGTCTGGCTCTTATA 84267 | C AAAA |
| GAN03732 LOC134992 3 | AAATGGAG CTG TTATA 64267 | C AAAA |
| | | |
| | TTTGCCTC GAC AATAT | |
| | A CGAG | |
| GAM3732 LOC196959 3' | TTCAAATGAAGTAAATGAA 84264 | CC |
| | TTCAAATGGAG TGAA | |
| | | |
| | AAGTTTACTTC ACTT | |
| GAM2722 OC107095 2 | ATTT TTCAAATGAAGTAAATGAA 84264 | CC |
| GAINI3/32 LOC19/0033 | TTCAAATGAAG TGAA | 00 |
| | | |
| | AAGTTTACTTC ACTT | |
| | ATTT | |
| GAM3732 LOC197115 3' | TTCAAATGAAGTAAATGAA 84264 | CC |
| | TTCAAATGGAG TGAA | |
| | AAGTTTACTTC ACTT | |
| | ATTT | |
| GAM3732 LOC197116 3' | TTCAAATGAAGTAAATGAA 84264 | CC |
| | TTCAAATGGAG TGAA | <u></u> |
| | 1111111111 1111 | |
| | AAGTTTACTTC ACTT | |
| | ATTT | |
| GAM3732 LOC197141 3' | TTCAAATGAAGTAAATGAA 84264 | CC |
| | TTCAAATGGAG TGAA | |
| | AAGTTTACTTC ACTT | |
| | ATTT | |
| GAM3732 LOC220534 3' | TTCAAATGGAGTAAATGAA 84263 | CC |
| | TTCAAATGGAG TGAA | |
| | 1111111111 1111 | |
| | AAGTTTACCTC ACTT | |
| 04440700 00000500 0 | ATTT | 00 |
| GAM3732 LOC220538 3 | TTCAAATGGAG TGAA | CC |
| | TTCAAATGGAG TGAA | |

```
ATTT
GAM3732 LOC254517 3' TTCAAATGAAGTAAATGAA 84264
                                               CC
                     TTCAAATGGAG TGAA
                     AAGTTTACTTC ACTT
                          ATTT
GAM3732 LOC257017 5' ATGGCACTGAAAATTATA 84268
                                            AGC
                     ATGG CTGAAAATTATA
                     TACC GACTTTTAATAT
                       GT
GAM3732 LOC257286 3' TTCAAATGGAGTAAATGAA 84263
                                               CC
                     TTCAAATGGAG TGAA
                     AAGTTTACCTC ACTT
                          ATTT
GAM3732 LOC51696 3' AATGGAGCCCATCCATTATA 84269
                                                AAA
                     AATGGAGCCTG ATTATA
                     TTACCTCGGGT TAATAT
                          AGG
GAM3733 F13A1 3' TTTAACTTTATTTTAAGCT 84272
                                          AC
                     TTTAA TTATTTTAAGCT
                     AAATT AATAAAATTCGA
                       GA
GAM3733 FLJ11017 3' TTAAGACTTATTTTGGCCAGC 84273
                                                 AA
                     TTAA ACTTATTTT GCTAGC
                     AATT TGAATAAAA CGGTCG
                       С
                            \mathsf{C}_{-}
GAM3733 MGC861 3' TTTAAACTTTTTTTAGCCA 84274
                     TTTAAACTT TTTTA GCTA
                     AAATTTGAA AAAAT CGGT
                         Α _
GAM3733 LOC151643 3' TCAAAACTAATTGAGCTAGCA 84275 T TATT A
                     TT AAACT TT AGCTAGCA
                     AG TTTGA AA TCGATCGT
                      T TT_ C
GAM3733 LOC152190 5' TTTAAACTTATCTTCAAGC 84276
                     TTTAAACTTATTT TAAGC
                     AAATTTGAATAGA GTTCG
GAM3734 DCK
             3' TAAATTATCATCTTTGAAT 84279
                     TAAATTATCATTTTTGAAT
```

AAGTTTACCTC ACTT

ATTTAATAGTAGAAACTTA

GAM3734 SFTPA2 3' TGATTATCTGGGTGAATGTATT 84280 A ATTTT A ATTATC TGAATGTATT A TAATAG ACTTACATAA ACCC GAM3734 WNT5A 3' TAAATTATCATTTTGAA 84281 Τ TAAATTATCATTTT GAA ATTTAATAGTAAAA CTT GAM3734 ZNF195 3' TAAGCTATCATTTTTGAACA 84282 TAA TTATCATTTTTGAATG ATT GATAGTAAAAACTTGT GAM3734 FLJ10525 3' TAAATTACTAATGAATGTATT 84283 CATTTT TAAATTAT TGAATGTATT ATTTAATG ACTTACATAA ATT GAM3734 FLJ14054 5' TAAATTATCCTTTTTGAA 84284 Α TAAATTATC TTTTTGAA ATTTAATAG AAAAACTT G GAM3734 HSAJ1454 3' CTATCATTTTTGTAAATATT 84285 AAT TTATCATTTTTG GTATT GATAGTAAAAAC TATAA ATT GAM3734 ZAK 3' AATTATCATTTTGAATGT 84286 Т **AATTATCATTTT GAATGT** TTAATAGTAAAA CTTACA GAM3735 FLJ20758 5' CATTAAACACGGTATATGAG 84289 AT_{-} TATTAAACA TATATGAG GTAATTTGT ATATACTC GCC GAM3735 KIAA0937 3' TATTAAACATTTATTTGAG 84290 A A TATTAAACA TTAT TGAG ATAATTTGT AATA ACTC AGAM3736 BHLHB3 3' TGGGAATAGATGCACTTGA 66796 AAATAC GT TGGGAATA TACT TGA

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ACCCTTAT GTGA ACT
                        CTAC__ _
                                           _ C GT_
GAM3736 ITK 3' TGGGAATAATAATATTACCTCA 66797
        TG
                     TGGGAATAA AATA TACT TG
                    ACCCTTATT TTAT ATGG AC
                        A A AGT
GAM3736 MPV17 3' TGGGAATAAGACTATTATCAAG 66798
                                           AAT C TG
                    TGGGAATAA ACTA TGT AG
                    ACCCTTATT TGAT ATA TC
                        C A GT
GAM3736 MSR1
             3' TGGGAATAAAAATGCTGA 66799
                                           TACTAC
                    TGGGAATAAAA
                                 TGTTGA
                    ACCCTTATTTT ACGACT
                         Т
GAM3736 RNMT 3' TGGGAATAATGGTGCTGA 66800
                                           AATACTAC
                    TGGGAATAA TGTTGA
                    ACCCTTATT
                                ACGACT
                        ACC
GAM3736 SCP2 3' TGGGAAGAAAATACTGTTTCTG 66801
                                         T ACTG
                    TGGGAA AAAATACT TTG
                    ACCCTT TTTTATGA GAC
                       С
                           CAAA
GAM3736 SFRP4 3' TGGGTATAAAATACTTGA 66802 A
                                             ACTGT
                    TGGG ATAAAATACT TGA
                    ACCC TATTTTATGA ACT
GAM3736 DKFZP564K0822 3' TGGGAATACAAAATTGTTGAG 66803
                                                AAATACTAC
                    TGGGAATA
                               TGTTGAG
                    ACCCTTAT
                               ACAACTC
                        GTTTTA
GAM3736 KIAA0564 3' TGGGAATAAGGTACATTTTG 66804
                                            AA TACTG
                    TGGGAATAA TAC TTG
                     ACCCTTATT ATG AAC
                        CC TAA
GAM3736 KIAA0769 3' TGGGAATAAAATAATGCCG 66805
                                              CTAC
                    TGGGAATAAAATA TGTTG
                    ACCCTTATTTTAT ACGGC
                          \mathsf{T}_{\_}
GAM3736 KIAA1163 3' TGGGAATCAAATACTAACCAAG 66806
                                             Α
                                                 CTG TG
                    TGGGAAT AAATACTA T AG
```

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ACCCTTA TTTATGAT G TC
                            T GT
GAM3736 KIAA1332 3' GGAATAAAATCCTTTGTTG 66807
                                              A AC
                     GGAATAAAAT CT TGTTG
                     CCTTATTTTA GG ACAAC
                         _{-} AA
GAM3736 SFRS11 3' TGGGAATAAATTATTACT
                                   66808
                                            A C
                     TGGGAATAAA TA TACT
                     ACCCTTATTT AT ATGA
                         A
GAM3736 ZNF387 3' TGGGAGTGGAATTACTGTTGAG 66809
                                             ATAAAATAC
                     TGGGA
                              TACTGTTGAG
                     ACCCT
                             ATGACAACTC
                       CACCTTA
GAM3736 LOC138639 3' TGGGAATAAGGCTTGGTGTT 66810
                                                AATACTAC
         GAG
                       TGGGAATAA
                                    TGTTGAG
                     ACCCTTATT
                                 ACAACTC
                         CCGAACCAC
GAM3736 LOC147299 3' TGGAAATAAAATGTTG
                                             TACTAC
                                   66811
                     TGGGAATAAAA
                                   TGTTG
                     ACCTTTATTTT
                                  ACAAC
GAM3736 LOC90019 5' CGGGAATAAGCAGCTGTTGAG 66812
                                                AATACTA
                     TGGGAATAA
                                 CTGTTGAG
                     GCCCTTATT
                                 GACAACTC
                         CGTC
GAM3737 F2RL3 3' TGGGCACCTCCCCAGTACAG 84294
                                                 GGA
                     TG GCACCTCCCCAG AG
                     AC CGTGGAGGGGTC TC
                      С
                            ATG
GAM3737 GALK1
             3' TGAGCACCCGGATATGGAAGAT 84295
                                               CCCCAG
         G
                      TGAGCACCT GGAAGATG
                     ACTCGTGGG
                                 CCTTCTAC
                         CCTATA
GAM3737 GPR56
             3' GAGGAGAACCCCAGGGAAGATG 84296
                                             CACCT
                     GAG CCCCAGGGAAGATG
                     CTC GGGGTCCCTTCTAC
                      CTCTT
GAM3737 TBX3
             3' TGAACACCTCCCGCCTGG 84297
                                              AG_{\underline{\phantom{a}}}
                     TGAGCACCTCCCC GG
```

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CGGA
GAM3737 C6orf9 3' CCAGTTCCCAGGGAAGGTGA 84298 TC
                    CC CCCAGGGAAG TGA
                    GG GGGTCCCTTC ACT
                     TCAA
                            C
GAM3737 Cab45 3' TGAGCACCTCCTCGGGCTCCAG 84299
                     TGAGCACCTCC
        G
                                  CCAGG
                    GGTCC
                    ACTCGTGGAGG
                        AGCCCGA
GAM3737 FLJ00058 5' CACCTCCCTGGGGTCCGGGAGA 84300
                                             CA A
        TG
                     CACCTCCC GGG AGATG
                    GTGGAGGG CCC
                                  TCTAC
                       AC AGGCCC
GAM3737 FLJ10829 3' TGAGCACCTTCAGCCAGAG 84301
                                           _ C_
                    TGAGCACCT C CCAGGG
                    ACTCGTGGA G GGTCTC
                       A TC
                                        CCTCCCC
GAM3737 FLJ10970 3' TGAGACAAGGGAAGAT
                                 84302
                    TGAG CA AGGGAAGAT
                    ACTC GT TCCCTTCTA
GAM3737 FLJ20847 5' GCCAAACCCCAGGGGAGATG 84303 ACCT
                    GC CCCCAGGG AGATG
                    CG GGGGTCCC TCTAC
                     GTTT
                           С
GAM3737 FLJ21324 5' TGAGGCTGGAGCCAGGGAAGGT 84304 CACCTCC
        G
                     TGAG CCAGGGAAG TG
                    IIII
                       ACTC GGTCCCTTC AC
                      CGACCTC
                                C
GAM3737 H17
           3' TGGCACAGTACTGGGGAAGATG 84305 A CTCCCCA
                    TG GCAC
                             GGGAAGATG
                    AC CGTG
                             CCCTTCTAC
                      TCATGAC
GAM3737 KIAA0179 3' GCAGCCTCTAGGGAAGATG 84306
                                         _ CCC
                    GCA CCTC AGGGAAGATG
                    CGT GGAG TCCCTTCTAC
                     C A_
GAM3737 KIAA0377 3' TGAACATTTCCCCAGAAAAGTG 84307
                                           CC
                                                GG A
        Α
                     TGAGCA TCCCCAG AAG TGA
```

ACTTGTGGAGGGG CC

```
ACTTGT AGGGGTC TTC ACT
                      AA
                           TT _
GAM3737 KIAA0449 3' TGAGCACCTCTCGCAGGG 84308
                                           CC
                    TGAGCACCTC CAGGG
                    ACTCGTGGAG GTCCC
                        AGC
GAM3737 KIAA0628 3' GAGCACAGGGAAGATG
                                 84309
                                        CTCCCC
                    GAGCAC AGGGAAGATG
                    CTCGTG TCCCTTCTAC
GAM3737 KIAA1036 3' TGGCACCTCCCAAGGTGA 84310 A
                                            С
                    TG GCACCTCCC AGG GA
                    AC CGTGGAGGG TCC CT
                         T A
GAM3737 MGC3265 3' AAGCACCTTGTGAAGATGA 84311
                                           CCCCAGG
                    GAGCACCT GAAGATGA
                    TTCGTGGA CTTCTACT
                       ACA
GAM3737 OR7E120 3' GCAGCCTTTCTCAGGGAAGATG 84312
                                           CCC
                    GCA CCT CAGGGAAGATGA
                    CGT GGA GTCCCTTCTACT
                     C AAGA
GAM3737 PTPN21 3' TGAGCACCTTTCCCAGGTTAGA 84313
                                            С
                                                GA
                    TGAGCACCT CCCAGG AGA
                    ACTCGTGGA GGGTCC TCT
                           AA
                       AΑ
GAM3737 TGOLN2 3' GAGCCCGGGCCCCAGGGA 84314
                                         ΑТ
                    GAGC CC CCCCAGGGA
                    CTCG GG GGGGTCCCT
                     _ CCC
GAM3737 LOC142972 5' GCACCTTTCCCAGGGAGATGA 84315
                                            C_
                    GCACCT CCCAGGGA GATGA
                    CGTGGA GGGTCCCT CTACT
                      AA
GAM3737 LOC153196 3' TGAGGGCCTGGGAGGAAGATG 84316
                                            CA CCCCA
                    TGAG CCT GGGAAGATG
                    ACTC GGA TCCTTCTAC
                     CC CCC_
GAM3737 LOC165229 5' TGAGAACCTCCCAAAGATG 84317
                                              CAGG
                    TGAG ACCTCCC GAAGATG
```

```
ACTC TGGAGGG TTTCTAC
GAM3737 LOC200812 3' GCACCCTTTCTCGGGGAAGATG 84318
                                             CCCCA
                    GCACCT
                             GGGAAGATGA
                    CGTGGG
                           CCCTTCTACT
                      AAAGAGC
GAM3737 LOC255696 5' TGGCTGCCTTCCAGAGAAGGTG 84319 A A_ CC
                                                     Α
                    TG GC CCT CCAGGGAAG TG
                    AC CG GGA GGTCTCTTC AC
                     AC A C
GAM3737 LOC91012 5' TGAACACCTTTTCAAGGA 84320
                                           CCC
                    TGAGCACCT CAGGGA
                    ACTTGTGGA GTTCCT
                       AAA
GAM3738 AARS 5' TCCCTCAGAGTCCCCCGCC 84323
                                        GCG C
                    TCC CTCGG G CCCCCGCC
                    AGG GAGTC C GGGGGCGG
                         ТΑ
GAM3738 ABCA2 5' TCCGCGCTGGCTCCGC
                                         CG CCC
                                 84324
                    TCCGCGCT GGC CCGC
                    AGGCGCGA CCG GGCG
                       __ A__
GAM3738 ABCB9 3' TCCACGCTCCCTACCCGCC 84325
                                           GGG C
                    TCCGCGCTC CC CCCGCC
                    AGGTGCGAG GG GGGCGG
                         ΑT
                                          C CCCCC
GAM3738 ABCG1 3' TCCATGCTCGGACTCTCTGCC 84326
                    TCCG GCTCGGGC GCC
                    AGGT CGAGCCTG CGG
                     Α
                         AGAGA
GAM3738 ADAM10 5' CCGCGCCCCTACCTCCCGCC 84327
                                            GG C
                    CCGCGCTC GCC CCCGCC
                    GGCGCGGG TGG GGGCGG
                       GA A
                                             TCG _ _ _
GAM3738 ADAMTS8 5' CCCGCGCAGCCGCCTCCTGCC 84328
                    TCCGCGC GGCC CC CC GCC
                    GGGCGCG TCGG GG GG CGG
                        __ C A A
GAM3738 AGRN
            3' TCCACGCTGCCACCTCGCC 84329
                                          CGG _ C
                    TCCGCGCT GCC CC CGCC
```

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___ T A
GAM3738 AKR1C4 3' TCCACACCACAGGGCCTTCTGC 84330
                                         C CCCC
                   TCCGCGCT GGGCC GC
                   AGGTGTGG CCCGG CG
                      TGT AAGA
GAM3738 AQP2 3' TCCGGCAGCCTCCTCCCCGCC 84331
                                        C TCGGG
                   TCCG GC CC CCCGCC
                   AGGC CG GG GGGGCGG
                    TCGGA A
GAM3738 ATP10C 5' TCCGCCGCTCACGCCCGCC 84332
                                        _ G C
                   TCCGC GCTCG GCCC CC
                   AGGCG CGAGT CGGG GG
                     GGC
GAM3738 BAZ1B 5' CCCAGCAGCCCCCCGCC 84333
                                      C TCG
                   TCCG GC GGCCCCCGCC
                   GGGT CG TCGGGGGGGGGG
GAM3738 BRF1 3' CCCGCGAGGCCCCCTGCC 84334
                                       CTC C
                   TCCGCG GGGCCCCC GCC
                   GGGCGC TCCGGGGG CGG
GAM3738 CAPN10 3' TCCTGCTGCCCCCGCC 84335
                                      GC CGG
                   TCC GCT GCCCCCGCC
                   AGG CGA CGGGGGGCGG
GAM3738 CASP2 5' TCGGCGCCGCCATTTCCCGC 84337 C CGG C
                   TC GCGCT GCC CCCGC
                   AG CGCGG CGG GGGCG
                    C ___ TAAA
GAM3738 CASP2 5' CCCGCGCTCGGCGCCCC 84336
                   TCCGCGCTCGG GCC CC
                   GGGCGCGAGCC CGG GG
                       G C
GAM3738 CASP2 5' CCCGCGCTCGGCGCCGCC 84336
                   TCCGCGCTCGG GCC CC
                   GGGCGCGAGCC CGG GG
                       G C
GAM3738 CASP2 5' TCGGCGCCGCCATTTCCCGC 84337 C CGG C___
```

TC GCGCT GCC CCCGC

AGGTGCGA CGG GG GCGG

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AG CGCGG CGG GGGCG
                    C ___ TAAA
GAM3738 CASP7 5' TCCGCTTCGGGCCCGC
                                       GC
                                            CCC
                                84338
                   TCCGC TCGGGCCC GC
                    AGGCG AGCCCGGG CG
                     Α
GAM3738 CCND1 5' TCCGCGCTCGGCTCTCGC 84339
                                        G CCCC
                   TCCGCGCTCGG C CGC
                    AGGCGCGAGCC G GCG
                        AGA
GAM3738 CDKN2D 5' CCTGCAAAGCCCCCCGCC 84340
                                        GC TC
                    CC GC GGGCCCCCGCC
                    GG CG TTCGGGGGGCGG
                    А Т
GAM3738 CDS1 5' CCGCGCAGGCCCCTCCCGCC 84341
                                         TC G
                   CCGCGC GG CCC CCCGCC
                   GGCGCG CC GGG GGGCGG
                      T_ G A
GAM3738 CHRNA5 5' TCCGCGCCACAGCTCCCGCC 84342
                                           CG CC
                   TCCGCGCT GGC CCCGCC
                    AGGCGCGG TCG GGGCGG
                       TG A
GAM3738 CLCN7 3' TCCGCGCCTGCCGCCTGCC 84343
                                         TGG CC
                   TCCGCGC C GCC CC GCC
                    AGGCGCG G CGG GG CGG
                      _A_ C A
                                       GCT CC
GAM3738 CLTB
            5' TCCGCCGGAGCCTCCGC 84344
                    TCCGC CGG GCC CCGC
                    AGGCG GCC CGG GGCG
                     ___ T A_
GAM3738 CLTB
            5' TCCGCCGGAGCCTCCGC 84344
                                       GCT _ CC
                    TCCGC CGG GCC CCGC
                    AGGCG GCC CGG GGCG
                      ___ T A_
GAM3738 CNN1
            3' CCCCCAATGGGCCCCCGCC 84345
                                        G CTC
                   TCC CG GGGCCCCCCGCC
                    GGG GT CCCGGGGGGGGGG
                     G TA_
GAM3738 CTSZ 5' TCCCGCTCCGGATCCCGC 84347
                                       G G CCC
                   TCC CGCTC GG CCCGC
```

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AGG GCGAG CC GGGCG
                       G TA_
GAM3738 CTSZ 5' TCCCGCTCTGGATCCCGCC 84348 G G CCC
                   TCC CGCTC GG CCCGCC
                   AGG GCGAG CC GGGCGG
                    _ A TA_
GAM3738 CTSZ 5' CCCGCGCCGGCTCCCGC
                                84346
                                        CG CC
                   TCCGCGCT GGC CCCGC
                   GGGCGCGG CCG GGGCG
                       Α
GAM3738 CXX1
            5' TCCATCGCTGCTCCTCGC 84349
                                       CGG C C
                   TCCG CGCT GC CC CGC
                   AGGT GCGA CG GG GCG
                     A A A
GAM3738 CYFIP2 5' CCGCGCTCGGCCCCGCC 84350
                                         GCC
                   CCGCGCTCGG CCCCGCC
                   GGCGCGAGCC GGGGCGG
GAM3738 DDB1 3' TCAGCAAAGGGGCCCCCTGCC 84351
                                        C CTC
                                                С
                   TC GCG GGGCCCCC GCC
                   AG CGT CCCGGGGG CGG
                    T TTC
                           Α
GAM3738 DDX26 5' TCCCCGTCGTACCCCCGCC 84352
                                       G C GGC
                   TCC CG TCG CCCCCGCC
                   AGG GC AGC GGGGGCGG
                     G _ AT_
                                        CG CCC
GAM3738 DHCR24 5' TCCGCGCCTGGCCCGC 84353
                   TCCGCGCT GGCCC GC
                   AGGCGCGG CCGGG CG
                      Α_
GAM3738 DSCR1 5' TCCGCCTCGGCCGCCCCGCC 84354
                                          G GC_
                   TCCGC CTCGG CCCCCGCC
                   AGGCG GAGCC GGGGGCGG
                        GGC
GAM3738 EFNA3 5' CCCGCGCTCCCGGCTTCTCCGC 84355
                                            G_ CCC_
                   TCCGCGCTC GGC CCGC
                   GGGCGCGAG CCG GGCG
                       GG AAGA
GAM3738 EHD4 5' TCCACGCTCGGATGGGACCCTG 84356
                                            CC___ C
        С
                    TCCGCGCTCGGG CCC GC
```

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AGGTGCGAGCCT GGG CG
                        ACCCT A
GAM3738 EN1 5' CCGCGCCGGCCCCGCC 84357
                                      T GC
                   CCGCGC CGG CCCCCGCC
                   GGCGCG GCC GGGGGCGG
                                         CG CC C
GAM3738 ENO1 5' CCCGCGCCGACTTCCTGCC 84358
                   TCCGCGCT GGC CC GCC
                   GGGCGCGG CTG GG CGG
                      AA A
GAM3738 EP300
           5' GCGCCCGGGCCCCCTGCC 84359
                                            С
                   GCGCTC GGGCCCCC GCC
                   CGCGGG CCCGGGGG CGG
                      G
                         Α
GAM3738 EPHA2 3' CCCTGGCGGGGCCCCCTGCC 84360 GC TC
                                                С
                   TCC GC GGGCCCCC GCC
                   GGG CG CCCGGGGG CGG
                    AC C_
                          Α
GAM3738 FEN1
            5' TCCCCGCAGGCCCCTGC 84361 G TC
                                            CC
                   TCC CGC GGGCCCC GC
                   AGG GCG TCCGGGG CG
                    G __
                          Α
GAM3738 FKBP10 3' CCTGGCCAGGCTCCCTGCC 84362 GC T C C
                   CC GC CGGGC CCC GCC
                   GG CG GTCCG GGG CGG
                    AC _ A A
                                         T GGC
GAM3738 FOXF1 5' CCGCGCCGCCTCCCCGCC 84363
                   CCGCGC CG CCCCGCC
                   GGCGCG GC GGGGGCGG
                     _ GGA
GAM3738 FZD10 5' TCCGCGCCCGGCGTCCGCC 84364
                                          G CCC
                   TCCGCGCTCGG C CCGCC
                   AGGCGCGGGCC G GGCGG
                       _ CA_
                                       ___ CGGG
GAM3738 FZD2
           5' TCCTTGGCGCCCCCCCCCC 84365
                   TCC GCGCT CCCCCGCC
                   AGG CGCGG GGGGGGCGG
                    AAC
GAM3738 GNB1
            5' CGCGCTCGGGCCGCGC
                                84366
                                         CCC
                   CGCGCTCGGGCC CGC
```

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GCGCGAGCCCGG GCG
                       C__
GAM3738 HCFC1 3' CCGCCGCGGGGCTCCTTGCC 84367 _ TC C CC
                   CCGC GC GGGC CC GCC
                   GGCG CG CCCG GG CGG
                    G C A AA
GAM3738 HDGF 5' TCCGCGCCGGGCCGGGAAGC 84368 T CCCC_
                   TCCGCGC CGGGCC GC
                   AGGCGCG GCCCGG CG
                      CCCTT
GAM3738 HIRA
           5' CCCGCGCCCCCTCCGCC 84369
                                       CGGG _
                   TCCGCGCT CCCC CCGCC
                   GGGCGCGG GGGG GGCGG
                      __ A
GAM3738 HIRA 5' CCCGCGCTCGGCCGC
                              84370
                                       GCCCC
                   TCCGCGCTCGG CCGC
                   GGGCGCGAGCC GGCG
GAM3738 HLX1 3' TCCACGCTGCGTCTCCTGCC 84371
                                        GGCCC C
                   TCCGCGCT CG CC GCC
                   AGGTGCGA GC GG CGG
                      C AGA A
GAM3738 HSF4
           5' GCGCTCGGGCCCGC 84372
                                         С
                   GCGCTCGGGCCC CCGC
                   CGCGAGCCCGGG GGCG
                       CC
GAM3738 IFNGR2 5' CCCGCGCCCCCGCCCCGCC 84373
                                          GG C
                   TCCGCGCTC GCCCCC GCC
                   GGGCGCGGG CGGGGG CGG
                      GG
GAM3738 JJAZ1 5' TCCTGCCTCCTCCCCCGCC 84374 _ G GGG
                   TCC GC CTC CCCCCGCC
                   AGG CG GAG GGGGGGCGG
                    A _ GA_
GAM3738 KAL1 5' TCCGGCCGGACCCTCCTCGCC 84375 C T
                   TCCG GC CGGGCCC CC CGCC
                   AGGC CG GCCTGGG GG GCGG
                        ΑΑ
```

GAM3738 KCNH3 5' TCCGCGCCGGGGGAGGGCGCC 84376

TCCGCGC CGGG CGCC

T CCCCC_

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AGGCGCG GCCC
                                GCGG
                      _ CCTCCC
GAM3738 KCNK3 3' CCCAGCAGGGGTCCCCCGCC 84377 C TC C
                   TCCG GC GGG CCCCCGCC
                   GGGT CG CCC GGGGGCGG
                    _ TC A
                                       GGC C
GAM3738 LASS2 5' CCCGCGCCCCCCCCCC 84378
                   TCCGCGCTCG CCC CGCC
                   GGGCGCGGC GGG GCGG
GAM3738 LHX5
           5' CCTGCCGGGCCCTCCGC 84379 GC T C
                   CC GC CGGGCCC CCGC
                   GG CG GCCCGGG GGCG
                    A A
GAM3738 LMO4 5' CCCGCGCTCCTCCCGC 84380
                                     CGGG C
                   TCCGCGCT CC CCCGC
                   GGGCGCGA GG GGGCG
                      ____ A
                                      CGCTC
GAM3738 LTB
           3' CCCGTAGGCGCCCCCGCC 84381
                   TCCG GG GCCCCCGCC
                   GGGC CC CGGGGGGCGG
                    AT G
GAM3738 MAP7 5' TCCCGCCGGCCCCCCC 84382 G T GC
                   TCC CGC CGG CCCCCGC
                   AGG GCG GCC GGGGGCG
GAM3738 MBNL 5' GCGCGGCCCCTCCCCGCC 84383
                                       TCG _
                   GCGC GGCCCC CCGCC
                   CGCG CCGGGG GGCGG
                        AGGG
GAM3738 MCM4
            5' TCCGCGCCACGCCCTCCCCGCC 84384
                                       T G __
                   TCCGCGC CG GCCC CCCGCC
                   AGGCGCG GT CGGG GGGCGG
                      _ G AG
GAM3738 MGAT2 5' CCTGCGCTCCACACATCCTCGC 84385 _ _ G CC _
        С
                    CC GCGCTC G GC CC CGCC
                   GG CGCGAG T TG GG GCGG
                    A GGTAA
GAM3738 MKI67 5' CCGCGCTCACCTCCGCC 84386
                                       GG CC
                   CCGCGCTC GCC CCGCC
```

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GGCGCGAG TGG GGCGG
```

__ A_

GAM3738 MMP2 5' CCCGCGCCCCAGCCCCGCC 84387 G C

TCCGCGCTC GGCCCCC GCC

GGGCGCGGG TCGGGGG CGG

G

GAM3738 MYO10 5' CCCGCGGGGCTCCCCTGC 84388 CTC _ C

TCCGCG GGGC CCCC GC

GGGCGC CCCG GGGG CG

___ A A

GAM3738 MYO1E 5' TCCGCCTCGCTCCCCTGCC 84389 G GG CC

TCCGC CTCG CCCC GCC

11111 1111 1111 111

AGGCG GAGC GGGG CGG

GA A

GAM3738 NFATC1 5' CCGCGCTCTGCCTCCTGCC 84390 GG C C

CCGCGCTC GCC CC GCC

GGCGCGAG CGG GG CGG

 A_{-} A A

GAM3738 NFRKB 5' TCCGCGCCCCTCCCGCC 84391 TCGGG _

TCCGCGC CCCCCCCC

AGGCGCG GGG GGGCGG

Α

GAM3738 NRGN 5' CCCGCGCTCGGCTCCGC 84392 G CCC

TCCGCGCTCGG C CCGC

GGGCGCGAGCC G GGCG

_ A___

GAM3738 PACE4 5' TCCGCGCCGGGGAAGCGCC 84393 T CCCCC

TCCGCGC CGGG CGCC

111111 1111 1111

AGGCGCG GCCC GCGG

_ CTTC_

GAM3738 PACE4 5' TCCGCGCCGGGGAAGCGCC 84393 T CCCCC

TCCGCGC CGGG CGCC

AGGCGCG GCCC GCGG

_ CTTC_

GAM3738 PACE4 5' TCCGCGCCGGGGAAGCGCC 84393 T CCCCC

TCCGCGC CGGG CGCC

AGGCGCG GCCC GCGG

_ CTTC

GAM3738 PACE4 5' TCCGCGCCGGGGAAGCGCC 84393 T CCCCC

TCCGCGC CGGG CGCC

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AGGCGCG GCCC GCGG
                      _ CTTC_
GAM3738 PACE4 5' TCCGCGCCGGGGAAGCGCC 84393 T CCCCC
                   TCCGCGC CGGG CGCC
                    AGGCGCG GCCC GCGG
                      _ CTTC_
GAM3738 PACE4 5' TCCGCGCCGGGGAAGCGCC 84393 T CCCCC
                   TCCGCGC CGGG CGCC
                    AGGCGCG GCCC GCGG
                      CTTC
GAM3738 PAPPA 5' TCCGACGTTCCCCCGCC 84394
                                       CGCT GG
                   TCCG CG CCCCCGCC
                   AGGC GC GGGGGGCGG
                     T AA
GAM3738 PHLDA3 5' TCCGCGCCCACCGCCCCGC 84395
                                           GG
                   TCCGCGCTC GCC CCCCGC
                   AGGCGCGGG TGG GGGGCG
                       __ C
GAM3738 PITX1 3' TCCGCGCCCCGCGCCCTTCCCCG 84396
                                            G __
        С
                    TCCGCGCTCG GCCC CCCGC
                    AGGCGCGGC CGGG GGGCG
                       G AAG
GAM3738 PPFIA3 3' CGGCGCGAGCTCCCCCGCC 84397 C T _
                   CG GC CGGGC CCCCGCC
                   GC CG GCTCG GGGGGCGG
                    _ C A
                                       СТ
GAM3738 PTBP1 3' CCGGCCAGGCCCCTGCC 84398
                                             С
                   CCG GC CGGGCCCCC GCC
                    GGC CG GTCCGGGGG CGG
                         Α
GAM3738 PTBP1 3' CCGGCCAGGCCCCTGCC 84398
                                       C T C
                    CCG GC CGGGCCCCC GCC
                    111 11 111111111 111
                    GGC CG GTCCGGGGG CGG
                          Α
GAM3738 PTPN11 5' TCCGCCCCCGCCCTTCGCC 84400 G GG CC
                   TCCGC CTC GCCC CGCC
                    AGGCG GGG CGGG GCGG
                     G __ AA
GAM3738 PTPN11 5' TCCTTGCTCAGGCTCCGC 84399
                                       GC
                                            CCC
                   TCC GCTCGGGC CCGC
```

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AGG CGAGTCCG GGCG
                     AA
                         Α__
GAM3738 PTPN11 5' TCCGCCCCCGCCCTTCGCC 84400 G GG CC
                   TCCGC CTC GCCC CGCC
                   AGGCG GGG CGGG GCGG
                     G __ AA
GAM3738 PTPN11 5' TCCTTGCTCAGGCTCCGC 84399
                                       GC
                                            CCC
                   TCC GCTCGGGC CCGC
                   AGG CGAGTCCG GGCG
                     AA
GAM3738 PTPRJ 5' CCCGCGCTCGTCCCGC 84401
                                         GGCCC
                   TCCGCGCTCG CCCGC
                   GGGCGCGAGC GGGCG
                       Α
GAM3738 ROBO1 5' CGCCCTCGGCCCCTCGCC 84402 G G C
                   CGC CTCGG CCCC CGCC
                   GCG GAGCC GGGG GCGG
                    G _ A
GAM3738 ROCK2 5' TCCAAGGCGGTCCCCGCC 84403
                                        CGCT GC
                   TCCG CGG CCCCGCC
                   AGGT GCC GGGGGCGG
                     TCC_ A_
                                       _ T GC
GAM3738 SIAH1 5' TCCGTCGCCAACCCCCGCC 84404
                   TCCG CGC CGG CCCCCGCC
                   AGGC GCG GTT GGGGGCGG
                                        G GG C
GAM3738 SIRT3 5' TCCGCCTCCCACCCCGCC 84405
                   TCCGC CTC GCCCCC GCC
                   AGGCG GAG TGGGGG CGG
                     _ GG _
GAM3738 SLC1A2 5' CCCGCGCTCCCCTCCGCC 84406
                                          GGG C
                   TCCGCGCTC CCC CCGCC
                   GGGCGCGAG GGG GGCGG
                        __ A
GAM3738 SMARCC2 5' TCCGGCTCGGGCCCCGCC 84407
                                         С
                   TCCG GCTCGGGCCCC CC
                   AGGC CGAGCCCGGGG GG
                          С
GAM3738 SMARCC2 5' TCCGGCTCGGGCCCCGCC 84407
                                         C
                   TCCG GCTCGGGCCCC CC
```

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AGGC CGAGCCCGGGG GG
                          C
GAM3738 SOLH 5' GCTGCCCGGACGCCTCCCGC 84408
                    GC GCTCGGGC CC CCCGC
                    CG CGGGCCTG GG GGGCG
                        CC A
GAM3738 SREBF1 5' TCCTGCTGCAGGCCCCCTGCC 84409
                                          GC _
                                                 С
                    TCC GCT CGGGCCCCC GCC
                    AGG CGA GTCCGGGGG CGG
                     A C
GAM3738 TNFRSF10C 3' TCCAGCGCCCCCGC 84410
                                        C TCGG
                    TCCG GC GCCCCCGC
                    AGGT CG CGGGGGGCG
GAM3738 TRPM7 5' CCCGCGCCCCGCCTCCGCC 84411
                                           GGC C
                    TCCGCGCTCG CC CCGCC
                    GGGCGCGGC GG GGCGG
                        ___ A
GAM3738 UGCG 5' CCCGCGCTCCGGTTCGCC 84412
                                          G CCCCC
                    TCCGCGCTC GG CGCC
                    GGGCGCGAG CC GCGG
                       G AA
GAM3738 UMPK
            5' CCCGCGTCGGACTCCCTCCGC 84413
                                           С
                    TCCGCG TCGGGC CCC CCGC
                    GGGCGC AGCCTG GGG GGCG
                         A
                                          C C C
GAM3738 VIPR2 3' CCCGAACCGTGGGCCTCCCGCC 84414
                    TCCG GCT GGGCC CCCGCC
                    GGGC TGG CCCGG GGGCGG
                     T CA A
GAM3738 WNT11 5' CCGCGCCGAAGTCCTCCGCC 84415
                                           CG C C
                    CCGCGCT GG CC CCGCC
                    GGCGCGG TC GG GGCGG
                      CT A A
GAM3738 WNT2
            5' CCGCGCCCCGCCCCCGC 84416
                                          GG
                    CCGCGCTC GCCCCCGC
                    GGCGCGGG CGGGGGGCG
                       GG
GAM3738 WNT6
            3' TCCTCTCAAGCCCCTCGCC 84417
                                        GCG
                                               C
                    TCC CTCGGGCCCC CGCC
```

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AGG GAGTTCGGGG GCGG
                          Α
GAM3738 WNT7A 5' TCCGCGCCTGAGCCTCGCC 84418 TC CCC
                   TCCGCGC GGGCC CGCC
                   AGGCGCG CTCGG GCGG
                      GA A
                                        _ GG
GAM3738 WRN
            5' TCCACCGCCCGCCCCCGCC 84419
                   TCCGC GCTC GCCCCCGCC
                   AGGTG CGGG CGGGGGCGG
                     G
GAM3738 XRCC3 5' TCCGCACTCCTCTTCCCGCC 84420
                                         GGGCCC
                   TCCGCGCTC CCCGCC
                   AGGCGTGAG GGGCGG
                      GAGAA
GAM3738 AAK1 5' CCGCGCTCGGCTCCCGCC 84421
                                        G CC
                   CCGCGCTCGG C CCCGCC
                   GGCGCGAGCC G GGGCGG
                       _ A_
                                         CGG _ _
GAM3738 AHCYL1 5' CCCGCGCCCCCCCCCCCC 45043
                   TCCGCGCT GCC CC CCGC
                   GGGCGCGG CGG GG GGCG
                      ___ T A
                                      CGCTC _
GAM3738 AKAP9 5' TCCGGGGCTCCCCGC 84422
                   TCCG GGGC CCCCGC
                   AGGC CCCG GGGGGCG
                                      G CCCC
GAM3738 ARHU 5' TCCGCGCTCCGGCGCGCC 84423
                   TCCGCGCTC GGC CGCC
                   AGGCGCGAG CCG GCGG
                      G CC
GAM3738 ASB10 3' CCTGCGGAGCTGGGCCTCCTGC 84424 _ _ _ C C C
                   CC GC GCT GGGCC CC GC
                   GG CG CGA CCCGG GG CG
                    A CCT _ A A
GAM3738 BC022889 5' CCCGCCGCCCCCCGC 84425 G CGG
                   CC CGCT GCCCCCGC
                   GG GCGG CGGGGGGCG
GAM3738 C13orf1 5' TCCGTCTCCTGCCCCGCC 84426
                                       CG GG
                   TCCG CTC GCCCCC GCC
```

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AGGC GAG CGGGGG CGG
                      A_ GA
GAM3738 C1orf25 5' TCCGTGCCAAGCCCGCC 84427 C T C
                    TCCG GC CGGGCCC CC
                    AGGC CG GTTCGGG GG
                      A _ C
GAM3738 C20orf39 5' TCCCCGCCCTGCGCTCTCCGCC 84428
                                          G GG_ CCC
                    TCC CGCTC GC CCGCC
                    AGG GCGGG CG GGCGG
                     G ACG AGA
GAM3738 C20orf58 5' CCCGCGCTCGGCCCCGCC 84429
                                            GC
                    TCCGCGCTCGG CCCCCGCC
                    GGGCGCGAGCC GGGGGCGG
                                          GGG C
GAM3738 C5orf7 5' CCCGCGCTCCCGCCCGCC 84430
                    TCCGCGCTC CC CCCGCC
                    GGGCGCGAG GG GGGCGG
                        ___ C
GAM3738 C8orf13 3' CGCTCCAGCCCCTCCGCC 84432
                                         G
                    CGCTC GGCCCC CCGCC
                    GCGAG TCGGGG GGCGG
                      G A
GAM3738 C8orf13 3' TCCAGCCCAAGCCCTCCGC 84431
                                             С
                    TCCG GCTCGGGCCC CCGC
                    AGGT CGGGTTCGGG GGCG
GAM3738 CAC-1 5' TCCGCGCTGGTCCCGC
                                         C GCCC
                                84433
                    TCCGCGCT GG CCCGC
                    AGGCGCGA CC GGGCG
                       _ A__
GAM3738 CARM1 5' TCCGGCTCCAGGCCCCGCC 84434
                                          C _
                    TCCG GCTC GGGCCCC CC
                    AGGC CGAG TCCGGGG GG
                      _ G C
GAM3738 CEACAM3 3' CCCTGCAAGCCCCCGC 84435
                                        GC TC
                                                С
                    TCC GC GGGCCCCC GC
                    GGG CG TTCGGGGG CG
GAM3738 CEACAM4 3' TCCTTGCAAGCCCCCGC 84436
                                         GC TC
                    TCC GC GGGCCCCC GC
```

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AGG CG TTCGGGGG CG
                     AA ___
GAM3738 CECR2 5' CCCGCGCTCTGCCCGCC 84437
                                         GG C
                    TCCGCGCTC GCCC CC
                    GGGCGCGAG CGGG GG
                       A C
GAM3738 CENTG2 5' CCGCGCGCCCCCGC
                                 84438
                                        TCGG
                    CCGCGC GCCCCCGC
                    111111 111111111
                    GGCGCG CGGGGGGCG
GAM3738 CHSY1 5' TCCGCACGCCCGCCCCGCC 84439
                                             GGC
                    TCCGC GCTCG CCCCCGCC
                    AGGCG CGGGC GGGGGCGG
                      TG
GAM3738 CLDN1 5' TCCGCGCCCGGGGCGCGC 84440
                                            CCCCC
                    TCCGCGCTCGGG CGC
                    AGGCGCGGCCC GCG
                        CGCC_
GAM3738 DAZAP1 3' CGCGCCCTCCCCCGCC 84443
                                         GGG
                    CGCGCTC CCCCCGCC
                    GCGCGGG GGGGGCGG
GAM3738 DAZAP1 5' TCCTCGCTCGCTCCCGCC 84442
                                        G GG CC
                    TCC CGCTC GC CCCGCC
                    AGG GCGAG CG GGGCGG
                     A __ A_
GAM3738 DAZAP1 5' TCGGCGCTCCCGGGCCTCCTCG 84441 C
        C
                    TC GCGCTC GGGCC CC CGC
                    AG CGCGAG CCCGG GG GCG
                    С
                        GG A A
GAM3738 DKFZp434E2220 5' CCCGCGCCCTCGCCCTCGCC 84444 GG CC
                    TCCGCGCTC GCCC CGCC
                    GGGCGCGGG CGGG GCGG
                       AG A_
GAM3738 DKFZP564K0322 5' TCCAGTAGGGTCCCCCGCC 84445
                                             CGCTC C
                    TCCG GGG CCCCGCC
                    AGGT CCC GGGGGCGG
                     CAT__ A
GAM3738 DMRTA2 3' GCTGCCAGGCCCCTCGCC 84446 _ T
                    GC GC CGGGCCCC CGCC
```

11 11 11111111 1111

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CG CG GTCCGGGG GCGG
                          Α
                                           _ G C C
GAM3738 ECE2 5' CCGCGGCCCCGGTCCCCTGCC 84447
                    CCGCG CTC GG CCCC GCC
                    GGCGC GGG CC GGGG CGG
                      CGAA
GAM3738 EIF4ENIF1 5' GCACTCGGTGCCTCCGCC 84448
                                           _ CC
                    GCGCTCGG GCC CCGCC
                    CGTGAGCC CGG GGCGG
                       A A_
GAM3738 FLJ10110 5' CCCGCGCTCAGCCCTCGCC 84449
                                             G CC
                    TCCGCGCTCGG CCC CGCC
                    GGGCGCGAGTC GGG GCGG
GAM3738 FLJ10206 5' TCCGGGCCCCGCCCCTCGC 84450
                                           C GG
                    TCCG GCTC GCCCCC CGC
                    AGGC CGGG CGGGGG GCG
                      C G_ A
GAM3738 FLJ10342 5' TCCGGCCGCCCCGC
                                        C T GGC
                                 84451
                    TCCG GC CG CCCCGC
                    AGGC CG GC GGGGGCG
GAM3738 FLJ10350 5' CGCGCCGCCCCCCCC
                                        T GGC
                                 84452
                    CGCGC CG CCCCGCC
                    GCGCG GC GGGGGCGG
                                        GC GC C
GAM3738 FLJ10769 3' CCTGCCCAGCTCCCTGCC 84453
                    CC GCTCGG C CCC GCC
                    GG CGGGTC G GGG CGG
                     A_ _ A A
GAM3738 FLJ10829 3' TCCCCCCCAGGCCTCCTGC 84454
                                               CC
                                         GCG
                    TCC CTCGGGCC CC GC
                    AGG GGGTCCGG GG CG
                     GG_
                           A
GAM3738 FLJ11535 3' CGGCCCGCCCCCGC
                                 84455 C GG
                    CG GCTC GCCCCCGC
                    GC CGGG CGGGGGGCG
GAM3738 FLJ11535 3' CGGCCCGCCCCCCC
                                 84455
                                       C GG
```

CG GCTC GCCCCCGC

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GAM3738 FLJ11560 5' TCCACGCTCACCCTGC 84456
                                        GGCC C
                    TCCGCGCTCG CCCGC
                    AGGTGCGAGT GGG CG
GAM3738 FLJ12132 5' TCCGGCCGCTCCCCGCC 84457
                                         C CGG _
                    TCCG GCT GC CCCCGCC
                    AGGC CGG CG GGGGGCGG
GAM3738 FLJ12242 5' CCCGCGCTGCTCCCGC 84458
                                         CGG CC
                    TCCGCGCT GC CCCGC
                    GGGCGCGA CG GGGCG
                       __ A_
GAM3738 FLJ12549 5' TCCCGCTCAGGCCTCCCGC 84459
                                         G
                                              С
                    TCC CGCTCGGGCC CCCGC
                    AGG GCGAGTCCGG GGGCG
                        Α
GAM3738 FLJ12643 5' CCCGCGCTGCCTCCCGCC 84460
                                          CGG C
                    TCCGCGCT GCC CCCGCC
                    GGGCGCGA CGG GGGCGG
                       ___ A
GAM3738 FLJ13955 5' TCCGGCTCGGGCTGCGGCCGCC 84461
                                           С
                                                CCC
                    TCCG GCTCGGGC CCGCC
                    AGGC CGAGCCCG GGCGG
                         ACGCC
GAM3738 FLJ14466 3' TCCACGCTCTGCCCCTTGC 84462
                                           GG CC
                    TCCGCGCTC GCCCC GC
                    AGGTGCGAG CGGGG CG
                       A_{-} AA
GAM3738 FLJ20080 5' TCCGCGGAGACCCCCGCC 84463
                                          CTC
                    TCCGCG GGGCCCCCCGCC
                    AGGCGC TCTGGGGGGGGG
                      C_{-}
                                           _ T GGC
GAM3738 FLJ20457 5' TCCGGCGCCGCCACCCCGCC 84464
                    TCCG CGC CG CCCCCGCC
                    AGGC GCG GC GGGGGCGG
                     C GGT
```

GAM3738 FLJ20551 5' TCCGCGGCTCTGCTCTCCTGCC 84465

TCCGCG CTC GC CC GCC

_ GG CC_ C

```
C A_ AGA A
GAM3738 FLJ21610 5' CCCGCGCTCCCCGC
                                        CGGGC
                                84466
                   TCCGCGCT CCCCCGC
                    GGGCGCGA GGGGGCG
GAM3738 FLJ21870 5' CCGCGCTGCTCCCCGCC 84467
                                         CGG _
                    CCGCGCT GC CCCCGCC
                    GGCGCGA CG GGGGGCGG
GAM3738 FLJ22865 5' CCGTGCTTCAGGCCCCCGCC 84468
                                         С
                    CCG GCT CGGGCCCCC GCC
                    GGC CGA GTCCGGGGG CGG
                     A
GAM3738 FLJ31564 5' TCCGGCCGCCCCCTCCCCGC 84469
                                          GGG
                   TCCG CGCTC CC CCCCGC
                   AGGC GCGGG GG GGGGCG
                     CG ___ A
GAM3738 FLJ32818 5' GCCGCCCAGGCCTCCCGCC 84470
                                            C
                   GC GCTCGGGCC CCCGCC
                    CG CGGGTCCGG GGGCGG
                    G
GAM3738 FOXJ1 5' CCGCGCTCTCTGGCCCGC 84471
                                         G CCC
                    CCGCGCTC GGCCC GC
                    GGCGCGAG CCGGG CG
                       AGA
GAM3738 GAP1IP4BP 5' TCCGCGCCCGCCGAGCCTCGCC 84472
                                                CCC
                   TCCGCGCTCG GGCC CGCC
                    AGGCGCGGC TCGG GCGG
                       GGC A_
GAM3738 GIOT-3 5' TCCCGCCGCCCCTTCGCC 84473
                                       G CGG C
                    TCC CGCT GCCCC CGCC
                    AGG GCGG CGGGG GCGG
                           AA
                                           GGG _
GAM3738 H2AFY 5' CCCGCGCTCTCCCCCTCCGCC 84474
                   TCCGCGCTC CCCC CCGCC
                    GGGCGCGAG GGGG GGCGG
                       AG_ A
                                           GGG _
GAM3738 H2AFY 5' CCCGCGCTCTCCCCCTCCGCC 84474
                   TCCGCGCTC CCCC CCGCC
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AGGCGC GAG CG GG CGG

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GGGCGCGAG GGGG GGCGG
                        AG_ A
                                              CC C
GAM3738 HCAP-G 5' CCCGCGCTCGGCTACAGCCTGC 84475
        C
                     TCCGCGCTCGG GC CC GCC
                    GGGCGCGAGCC TG GG CGG
                        GA TC A
            5' CCCGCGCTCGGGCCGCCCCTCG 84476
GAM3738 HRK
        CC
                     TCCGCGCTCGGGCC CCCC GCC
                    GGGCGCGAGCCCGG GGGG CGG
                         C AG
GAM3738 HSPC156 5' CCCGCGCGCCGGCTCCTGC 84477
                                           CG C CC
                    TCCGCGCT GGC CC GC
                    GGGCGCGG CCG GG CG
                        АА
GAM3738 KATII 5' CCGCGCCCCTCCCGCC
                                         CGGG _
                                84478
                    CCGCGCT CCC CCCGCC
                    GGCGCGG GGG GGCGG
                        ___ A
GAM3738 KEAP1 5' CCGCGCTCCGGCTCCGCC 84479
                                          G CCC
                    CCGCGCTC GGC CCGCC
                    GGCGCGAG CCG GGCGG
                       G A
GAM3738 KIAA0215 5' CCCGCGCCTCAGCTCCCGCC 84480
                                            CG CC
                    TCCGCGCT GGC CCCGCC
                    GGGCGCGG TCG GGGCGG
                       AG A_
GAM3738 KIAA0215 5' TCCTCGCCCCCGCCCCCCCC 84481
                                           G GG
                    TCC CGCTC GCCCCCCGCC
                    AGG GCGGG CGGGGGGCGG
                     A GG
GAM3738 KIAA0227 5' TCCGCGCCCGCCCGCC 84482
                                             CGG _
                    TCCGCGCT GCCC CCCGCC
                    AGGCGCGG CGGG GGGCGG
                         _ CGA
GAM3738 KIAA0284 3' GCGCTCACCCCGCC
                                 84483
                                         GGC
                    GCGCTCG CCCCCGCC
                    1111111 11111111
                    CGCGAGT GGGGGCGG
                                          C_ CGG CC
GAM3738 KIAA0376 3' CCCGTAACTGCTTCCCGCC 84484
```

TCCG GCT GC CCCGCC

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GGGC TGA CG GGGCGG
                      AT ___ AA
GAM3738 KIAA0397 5' CCGCGCTCCCGGCCCGCC 84485
                                            G C
                    CCGCGCTC GGCCC CC
                    GGCGCGAG CCGGG GG
                        GG C
GAM3738 KIAA0427 3' TCCAGCGGGGACCCCCGCC 84486 _ CTC
                    TCC GCG GGGCCCCCGCC
                    AGG CGC CCTGGGGGGGGG
                     T C
GAM3738 KIAA0441 5' CCCGCTGGCCCTCCGC 84487
                                        G CG C
                    CC CGCT GGCCC CCGC
                    11 1111 1111 1111
                    GG GCGA CCGGG GGCG
                           Α
GAM3738 KIAA0603 5' TCCGCGCTTCAGCAGCCCTGCC 13646
                                              CG C C
                    TCCGCGCT GGC CCC GCC
                    AGGCGCGA TCG GGG CGG
                        AG TC A
GAM3738 KIAA0649 5' TCCGGCCGGGCCCCCCCC 84488
                                           СТ
                    TCCG GC CGGGCCCCCGCC
                    AGGC CG GCCCGGGGGGCGG
GAM3738 KIAA0759 5' CCCGCGCCCCCCCCCC 84489
                                            GGC C
                    TCCGCGCTCG CC CCGC
                    GGGCGCGGC GG GGCG
GAM3738 KIAA0821 5' CGAACCCGGGCCCCCGCC 84490
                    CG GCTCGGGCCCCCCGCC
                    GC TGGGCCCGGGGGGGCGG
                     Т
GAM3738 KIAA1030 3' TCCGCCTGCCCGCCCCGCC 84491
                                               GGC
                    TCCGC GCTCG CCCCCGCC
                    AGGCG CGGGC GGGGGCGG
                      GA
GAM3738 KIAA1161 5' CGCGCTCGGGCACATCGCC 84492
                                             CCCC
                    CGCGCTCGGGC CGCC
                    GCGCGAGCCCG GCGG
                         TGTA
GAM3738 KIAA1199 5' CCGCGCTCAGCCCCGC
                                  84493
                                           GCC
                    CCGCGCTCGG CCCCGC
```

GGCGCGAGTC GGGGCG

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GAM3738 KIAA1297 3' CCCGCGCCGAGCTCCCGCC 84494 T CC
                   TCCGCGC CGGGC CCCGCC
                   GGGCGCG GCTCG GGGCGG
                      _ A_
GAM3738 KIAA1332 5' TCCACGCTCTCGGGTTCGC 84495
                                          __ cccc
                   TCCGCGCTC GGG CGC
                   AGGTGCGAG CCC GCG
                       AG AA
GAM3738 KIAA1957 3' TCCGCGCCCACCCTCG 84496
                                       GG CC
                   TCCGCGCTC GCCC CG
                   AGGCGCGGG TGGG GC
                       __ A_
GAM3738 KIAA1981 3' CCCGCGCCTCCTCCTCCGCC 84497
                                          CGGG _ _
                   TCCGCGCT CC CC CCGCC
                   GGGCGCGG GG GGCGG
                      A___ A A
GAM3738 LHFPL2 5' TCCACGCCGCCGCGGCTCCTCG 84498
                                           __ _ C C
        С
                    TCCGCGCT CG GGC CC CGC
                   AGGTGCGG GC CCG GG GCG
                      CG G A A
GAM3738 LIP8 5' CCGTTGGCAGCCTCCCGCC 84499 C TCG C
                   CCG GC GGCC CCCGCC
                   GGC CG TCGG GGGCGG
                    AAC A
GAM3738 MAN1C1 5' TCCGGCCGAGCCCTCCCCGCC 84500
                                        СТ
                   TCCG GC CGGGCCC CCCGCC
                   AGGC CG GCTCGGG GGGCGG
                         AG
GAM3738 MAP3K6 5' TCCACGCTGTCCAGTCTCCGC 84501
                                           GCCCC
                   TCCGCGCT CGG CCGC
                   AGGTGCGA GTC GGCG
                      CAG AGA
GAM3738 MAPKAPK2 5' TCCGGGCCCCCTCCCCGCC 84502
                                          C GGG
                   TCCG GCTC CC CCCCGCC
                   AGGC CGGG GG GGGGCGG
                     C ___ A
GAM3738 MAPKAPK2 5' TCCGGGCCCCCTCCCCGCC 84502
                                          C GGG _
                   TCCG GCTC CC CCCCGCC
```

```
AGGC CGGG GG GGGGCGG
                     C ___ A
GAM3738 MGC10848 3' GCACTCAGGCTTCCCGCC 84503
                                           CC
                   GCGCTCGGGC CCCGCC
                   CGTGAGTCCG GGGCGG
                       AA
GAM3738 MGC14386 5' TCCATGCCTGCCCCGCC 84504
                                         C T GG C
                   TCCG GC C GCCCCC GCC
                    AGGT CG G CGGGGG CGG
                     А А
GAM3738 MGC15875 5' TCCGAGCCCCGCCCCTGCC 84506
                                          C GG CC
                   TCCG GCTC GCCCC GCC
                   AGGC CGGG CGGGG CGG
                     T G A
GAM3738 MGC15875 5' CGCACTCGGCCCCGCC 84505
                                          GCC
                   CGCGCTCGG CCCCGCC
                    GCGTGAGCC GGGGCGG
GAM3738 MGC29643 5' CCCGCGCTCGGGCTCCCGGC 84507
                                              CC
                   TCCGCGCTCGGGC CCC GC
                    GGGCGCGAGCCCG GGG CG
                        A C
                                         CGCTC C
GAM3738 MGC4415 3' TCCGGGGATTCCCCCGCC 84508
                   TCCG GGG CCCCGCC
                    AGGC CCC GGGGGCGG
                         TAA
GAM3738 MGC4701 5' CCCGCCCCAGCTCCTCGCC 84509 G G C C
                   CC CGCTC GGC CC CGCC
                    GG GCGGG TCG GG GCGG
                    _ G A A
            5' CCCGCGCTCCACCCTCTCCCCG 84510
                                           GG _
GAM3738 MIG2
        CC
                     TCCGCGCTC GCCC CCCGCC
                    GGGCGCGAG TGGG GGGCGG
                       G_ AGAG
GAM3738 MRPL24 5' TCAGCGTCCCCTCCCCGCC 84511 C _ GGGC
                   TC GCG CTC CCCCGCC
                    AG CGC GGG GGGGCGG
                    T A GA__
GAM3738 NEIL2 3' CCCTGCTCCACCCCCGCC 84512 GC GGGC
                   TCC GCTC CCCCGCC
```

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GGG CGAG GGGGGCGG
                     A_ GT__
GAM3738 NESCA 5' CCGCGCTCACCTCCCGCC 84513
                                          GG C
                    CCGCGCTC GCC CCCGCC
                    GGCGCGAG TGG GGGCGG
                       __ A
GAM3738 NOL4
            5' CCCGCGCTCGGCCGC
                                84370
                                         GCCCC
                    TCCGCGCTCGG CCGC
                    GGGCGCGAGCC GGCG
GAM3738 OSGEP 5' TCCGCGCTGGGCCGCAGC 84514
                                          C CCCC
                    TCCGCGCT GGGCC GC
                    AGGCGCGA CCCGG CG
                         CGT
GAM3738 PANX1 5' CGCGCTCGCTGCCTCCGCC 84515
                                          G CC
                    CGCGCTCG GCC CCGCC
                    GCGCGAGC CGG GGCGG
                       GA A_
GAM3738 PDE4DIP 5' CCGCGCTCCGACCCTGCC 84516
                                          G CCC
                    CCGCGCTC GGCCC GCC
                    GGCGCGAG CTGGG CGG
                       G A
GAM3738 PIP5K2A 5' CCGCGCTCCGCTCCGCC 84517
                                          GG CCC
                    CCGCGCTC GC CCGCC
                    GGCGCGAG CG GGCGG
                       G_ A__
GAM3738 PLAGL2 5' CCGCGCTCGGGCTCCGCC 84518
                                            CCC
                    CCGCGCTCGGGC CCGCC
                    GGCGCGAGCCCG GGCGG
                        Α___
GAM3738 PPP1R14A 5' CCCGCGCTGTGCGCCTTCGCC 84519
                                             CGG _ CC
                    TCCGCGCT GC CC CGCC
                    GGGCGCGA CG GG GCGG
                       CA_ C AA
GAM3738 PTK9L 5' TCCGCGCCGTCGGAGCCCTCCG 84520
                                                 С
        С
                    TCCGCGC TCGG GCCC CCGC
                    AGGCGCG AGCC CGGG GGCG
                       GC T A
GAM3738 QKI
           5' TCCGCGCCGGCTCCCGC
                               84521
                                        CG CC
                    TCCGCGCT GGC CCCGC
```

11111111 111 11111

GAM3738 RAB40C 3' CCGCGCCCCCCCCCCCC 84523 GGG C CCGCGCTC CC CCCGCC

GGCGCGG GG GGGCGG

С

GGA A

GAM3738 RBAK 5' TCCCGCCGCCCCTTCGCC 84473 G CGG C_ TCC CGCT GCCCC CGCC

AGG GCGG CGGGG GCGG

AA

GAM3738 RNPC1 3' CCCGCTGCCCCCGC 84524 G CGG

CC CGCT GCCCCCGC

GG GCGA CGGGGGGCG

GAM3738 SDS3 5' CCCGCGCTCGGTACTCGCC 84525 GCCCCC

TCCGCGCTCGG CGCC

GGGCGCGAGCC GCGG

ATGA__

GAM3738 Sfmbt 5' CCCGCGCTCGCCCGC 84526 GGCCC

TCCGCGCTCG CCCGC

GGGCGCGAGC GGGCG

GAM3738 SLC2A10 5' TCCGGCCCCCCCCC 84527 C GGC

TCCG GCTCG CCCCCGC

AGGC CGGGC GGGGGCG

GAM3738 SMARCA4 5' CCCGGCGCCTCCCCCGCC 84528 _ _

CTCGG GCC CCCCGCC

GGGCC CGG GGGGCGG

G AG

GAM3738 SMARCE1 5' CCCGCGCTCGCCCCGC 84529 GGCC

TCCGCGCTCG CCCCGC

GGGCGCGAGC GGGGCG

GAM3738 SOUL 5' GCGCGTCCTGCCCCGCC 84530 _ GG C

GCGC TC GCCCCC GCC

```
CGCG AG CGGGGG CGG
                     C GA
GAM3738 SPUVE 5' TCCGCGCCGAGCAGCCCGCC 84531 T CC
                   TCCGCGC CGGGC CCCGCC
                   AGGCGCG GCTCG GGGCGG
                      _ TC
GAM3738 STIM2 5' CCGCGGCGCATCCCCCGCC 84532
                                       T GG
                   CCGCG C CG CCCCCGCC
                    GGCGC G GT GGGGGGCGG
                     CCA
GAM3738 STIM2 5' TCCGGCCGCCCCGC 84451 C T GGC
                   TCCG GC CG CCCCGC
                   AGGC CG GC GGGGGCG
GAM3738 TADA3L 5' TCCGCGCTGCAGTTAGCCCCGC 84533
                                            GCC
        С
                    TCCGCGCT CGG CCCCGCC
                    AGGCGCGA GTC GGGGCGG
                       C AATC
GAM3738 TADA3L 5' TCCGCGCTGCAGTTAGCCCCGC 84533
                                            _ GCC_
        С
                    TCCGCGCT CGG CCCCGCC
                    AGGCGCGA GTC GGGGCGG
                       C AATC
GAM3738 TADA3L 5' TCCGCGCTGCAGTTAGCCCCGC 84533
                                            GCC
        С
                    TCCGCGCT CGG CCCCGCC
                    AGGCGCGA GTC GGGGCGG
                       C AATC
GAM3738 TAF5L 5' TCCGGCTCCCCCGC
                              84534 C CGGG
                   TCCG GCT CCCCCGC
                    AGGC CGA GGGGGGCG
GAM3738 TMEM8 5' TCCGCGCTCGGCCCGGCGC 84535 G CC
                    TCCGCGCTCGG CCC CGC
                    AGGCGCGAGCC GGG GCG
                        _ CC
GAM3738 TNKS2 5' CCCTCGCTGGGCTCCCTGCC 84536 G C C C
                   TCC CGCT GGGC CCC GCC
                    111 1111 1111 111 111
                    GGG GCGA CCCG GGG CGG
                    A _ A A
GAM3738 TSGA 5' TCCTCCCCGCCTCCCGCC 84537
                                       GCG GG C
```

TCC CTC GCC CCCGCC

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AGG GGG CGG GGGCGG
                     AG_ G_ A
                                            G GG ___
GAM3738 ZDHHC2 5' TCCGCCCCGCCGTTCCCCGCC 84538
                    TCCGC CTC GCC CCCCGCC
                    AGGCG GGG CGG GGGCCGG
                      G _ CAA
GAM3738 ZDHHC2 5' GCGCTCCGCCCCGCC
                                  32625
                                         GG
                                            С
                    GCGCTC GCCCCC GCC
                    CGCGAG CGGGGG CGG
                      G
GAM3738 ZFP91
            5' TCGGCGCTGCTCCCCCCGCC 84539 C CGGG
                    TC GCGCT CCCCCGCC
                    AG CGCGA GGGGGGCGG
                     C CGA
GAM3738 ZNF297B 5' TCAGCGCTCACATCCCCCGCC 84540 C
                                             GGC
                    TC GCGCTCG CCCCCGCC
                    AG CGCGAGT GGGGGCGG
                     Т
                        GTA
GAM3738 LOC115073 5' TCCTGCTCGGACCCCGC 84541
                                         GC
                                               CC
                    TCC GCTCGGGCCCC GC
                    AGG CGAGCCTGGGG CG
GAM3738 LOC115548 5' TCCGCGCCCGCCCGC
                                           GGCCC
                                  84542
                    TCCGCGCTCG CCCGC
                    AGGCGCGGGC
                                GGGCG
GAM3738 LOC115574 5' CCCGCGCGCGCCCCCTCGCC 45174
                                             ΤG
                    TCCGCGC CG GCCCCC CGCC
                    GGGCGCG GC CGGGGG GCGG
                       _ G A
GAM3738 LOC126969 5' CCCGCGTCTCCCCCGC
                                  84543
                                         C GGGC
                    TCCGCG TC CCCCCGC
                    GGGCGC AG GGGGGCG
                      _ A__
GAM3738 LOC128844 5' CCCGCGCTGGGCTCCTGCC 84544
                                            C C CC
                    TCCGCGCT GGGC CC GCC
                    GGGCGCGA CCCG GG CGG
                       _ A A_
GAM3738 LOC129408 5' CCGCGCCCCGCTCCTCGC 84545
                                           GG C C
                    CCGCGCTC GC CC CGC
```

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GGCGCGGG CG GG GCG
                       G_AA
GAM3738 LOC130074 5' TCCCGCTCGCTCGGCTCCGC 84546 G CCC
                    TCC CGCTCG GGC CCGC
                    AGG GCGAGC CCG GGCG
                        GAG A
GAM3738 LOC130367 5' CCCGCCTCGCCCCCGCC
                                   84547
                                          G GGC
                    TCCGC CTCG CCCCGCC
                    GGGCG GAGC GGGGGCGG
GAM3738 LOC130617 5' ACTCTGGCGGGCTCCCTGCC 84548 G C C
                    GC CT CGGGC CCC GCC
                    11 11 11111 111 111
                    TG GA GCCCG GGG CGG
                     A CC A A
GAM3738 LOC133993 5' CCCGCGGACCCCTCTGCC 84549
                                          GCTC
                                                 CC
                    TCCGC GGGCCCC GCC
                    GGGCG CCTGGGG CGG
                           AGA
GAM3738 LOC139231 5' CCCGCGCCCCCCCCCCC 84550
                                            GG CC
                    TCCGCGCTC GCCC GCC
                    GGGCGCGGG CGGGG CGG
                        __ A_
GAM3738 LOC143666 5' CCCGCGCTCAGGCCTCCCC 84551
                    TCCGCGCTCGGGCC CCCC
                    GGGCGCGAGTCCGG GGGG
GAM3738 LOC145694 5' CCGCGTCGCCCCCGCC 84552
                                          C GG
                    CCGCG TC GCCCCCGCC
                    GGCGC AG CGGGGGGCGG
GAM3738 LOC145990 5' TCCCCGCCGCCGCCCCCCC 84553
                                           G T GGC
                    TCC CGC CG CCCCCGCC
                    AGG GCG GC GGGGGCGG
                     G GGC
GAM3738 LOC147965 5' TCCGCGCCCCGCCTCTCGC 84554
                                           GG CCC
                    TCCGCGCTC GCC CGC
                    AGGCGCGGG CGG GCG
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_ AGA

TCCGCGCT GCCCCCGCC

CGG

GAM3738 LOC148022 5' TCCACACTGCCCCCGCC 84555

AGGTGTGA CGGGGGGCGG

```
_ _ C
GAM3738 LOC148479 3' TCCACGCTCGCAGCCTCCTCGC 84556
        С
                    TCCGCGCTCG GGCC CC CGCC
                   AGGTGCGAGC TCGG GG GCGG
                       GAA
GAM3738 LOC148753 5' TCCGGGGAGAATCCCCCGCC 84557
                                          CGCTC C
                   TCCG GGG CCCCGCC
                   AGGC CCC GGGGGCGG
                        TCTTA
GAM3738 LOC150095 5' TCCTGCCCCATGCCCCCGCC 84558
                                         G G
                   TCC GC CTCG GCCCCCGCC
                   AGG CG GGGT CGGGGGGCGG
                    A A
GAM3738 LOC150142 5' TCCGCGCCCCGGGCACAGGC 84559
                                           CCCCC
                   TCCGCGCTCGGGC GC
                   AGGCGCGGGCCCG CG
                        TGTC_
GAM3738 LOC150150 3' TCTGCGCCTCCCCGCC 84560 C CGGGC
                   TC GCGCT CCCCGCC
                   AG CGCGG GGGGGCGG
                    A A
GAM3738 LOC150421 3' TCCCGCTCAGGCCCCCTGCC 84561
                                         G
                                               С
                   TCC CGCTCGGGCCCCC GCC
                   AGG GCGAGTCCGGGGG CGG
GAM3738 LOC150465 3' TCAGCAAAGCCCCCTGCC 84562 C CTC
                   TC GCG GGGCCCCC GCC
                   AG CGT TTCGGGGG CGG
                    T A
GAM3738 LOC152559 5' CGCCGCTGGCGCCCCGCC 84563
                                         _ CG _
                   CGC GCT GGC CCCCGCC
                   GCG CGA CCG GGGGGCGG
                    G __ C
GAM3738 LOC152917 5' CACGCTCGCCCTCCGCC 84564
                                         GG C
                   CGCGCTC GCCC CCGCC
                   GTGCGAG CGGG GGCGG
GAM3738 LOC153432 5' TCCGCACCTGCCTTCCGC 84565
                                         TGG CC
                   TCCGCGC C GCC CCGC
```

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AGGCGTG G CGG GGCG
                       _ A_ AA
GAM3738 LOC157848 3' TCCTGCCCACTCCCCCGCC 84566 GC GG
                    TCC GCTCG CCCCCGCC
                    AGG CGGGT GGGGGGCGG
                      A GA
GAM3738 LOC161190 5' GCGGACAGGCCCCCTGCC 84567
                                           CT C
                    GCG CGGGCCCCC GCC
                     111 11111111111111
                    CGC GTCCGGGGG CGG
                      CT
GAM3738 LOC164633 5' TCCGCGCCCGCCCGC
                                   84542
                                            GGCCC
                    TCCGCGCTCG CCCGC
                    AGGCGCGGC GGGCG
GAM3738 LOC165254 5' CCGCGCTCCAGCACTCTTCGCC 84568 G CCCC
                    CCGCGCTC GGC
                                 CGCC
                    | ||||
                     GGCGCGAG TCG
                                   GCGG
                        G TGAGAA
GAM3738 LOC166983 5' TCCAGAAGCCCCCTGCC
                                          CGCTC
                                                  C
                                   84569
                    TCCG GGGCCCCC GCC
                     AGGT TTCGGGGG CGG
GAM3738 LOC199745 5' CCCGCGCTCGCCGCCTGCC 84570
                                              GG CC
                    TCCGCGCTC GCC CC GCC
                    GGGCGCGAG CGG GG CGG
                         CA
GAM3738 LOC199848 5' CCGCACCGTCCCCGCC 84571
                                           T GGC
                    CCGCGC CG CCCCGCC
                    GGCGTG GC GGGGGCGG
GAM3738 LOC199870 5' CCGCGCTCACCGACCCGCC 84572
                                             GG C_
                    CCGCGCTC GCC CCCGCC
                     GGCGCGAG TGG GGGCGG
                        __ CT
GAM3738 LOC200084 5' TCCGGGCTCGGGCTCCGGC 84573
                                            С
                                                CC C
                    TCCG GCTCGGGC CC GC
                    AGGC CGAGCCCG GG CG
                          A_C
                      С
                                              т __
GAM3738 LOC200576 5' CCGCGCCGGCTGCCCCCGCC 84574
                    CCGCGC CGG GCCCCCGCC
```

```
GGCGCG GCC CGGGGGGCGG
                      _ GA
GAM3738 LOC201161 5' CCTGCGCGCGCCCCCGCC 45199 _ TCGG _
                    CC GCGC GC CCCCGCC
                    GG CGCG CG GGGGGCGG
GAM3738 LOC201514 5' CCCGCGCCTCCCTCGC
                                           CGGG C
                                   84575
                    TCCGCGCT CCCC CGC
                    GGGCGCGG GGGG GCG
                                          _ C GG
GAM3738 LOC203197 5' TCACGGGCCCGCCCCCCCC 84576
                    TC CG GCTC GCCCCCGCC
                    AG GC CGGG CGGGGGGCGG
                     T C
                                            ΤG
GAM3738 LOC206836 5' CCGCGCCGCCACCCCCGCC 84577
                    CCGCGC CG GCCCCCCGCC
                    GGCGCG GC TGGGGGGCGG
                      _ GG
GAM3738 LOC221773 5' CCCGCGCCCGGGGTCCTCCGCC 84578
                                                CC
                    TCCGCGCTCGGG CC CCGCC
                    GGGCGCGGCCC GG GGCGG
                         CA A
GAM3738 LOC222166 5' CCCGCGCCCCGCCTCCCGCC 84579
                                             GG C
                    TCCGCGCTC GCC CCCGCC
                    GGGCGCGG CGG GGGCGG
GAM3738 LOC222166 5' TCCGCCCCGCCTCCCCCGCC 84581
                                            G GG
                    TCCGC CTCG CCCCCGCC
                    AGGCG GGGC GGGGGGGGG
                      _ GGA
GAM3738 LOC222166 5' CCCGCGGCTCCTCCTCCGCC 84580
                                            _ GGG CC
                    TCCGCG CTC CC CCGCC
                    GGGCGC GAG GG GGCGG
                      C GA_A_
GAM3738 LOC253258 3' CCCGCGCTCAGGCCTCCCC 84551
                    TCCGCGCTCGGGCC CCCC
                    GGGCGCGAGTCCGG GGGG
GAM3738 LOC253936 5' CCCGCGCCCACCTCCCTCCGCC 84582
                                               GG_ C
                    TCCGCGCTCG CCC CCGCC
```

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GGGCGCGGT GGG GGCGG
                        GGA A
                                               G _ _
GAM3738 LOC254124 3' CCGCGCCCGGCCGCCCCTTGCC 84583
                    CCGCGCTCGG CC CCCC GCC
                    GGCGCGGGCC GG GGGG CGG
                        _ C AA
GAM3738 LOC255251 5' CGCACTCGGCCCCGCC
                                           GCC
                                  84505
                    CGCGCTCGG CCCCGCC
                    11111111 1111111
                    GCGTGAGCC GGGGCGG
GAM3738 LOC255251 5' TCCGGGCCCCGCCCTGCC 84584
                                           C GG
                                                CC
                    TCCG GCTC GCCCC GCC
                    AGGC CGGG CGGGG CGG
                     C G A
GAM3738 LOC255645 3' TCCGCGCCCCCACC
                                 84585
                                        GCTCGG
                    TCCGC GCCCCCGCC
                        AGGCG CGGGGGGTGG
GAM3738 LOC255971 3' TCCGCACCAGCCCCCGCC 84586
                                            CG
                    TCCGCGCT GGCCCCCGCC
                    AGGCGTGG TCGGGGGGCGG
GAM3738 LOC51112 5' CCCGCGTCGCCCTCGC 84587
                                         C GGC C
                    TCCGCG TCG CCC CGC
                    GGGCGC AGC GGG GCG
GAM3738 LOC51125 5' CCCGCGCCCCCTCTCTGCC 84588
                                            CGG CC
                    TCCGCGCT GCC CC GCC
                    GGGCGCGG CGG GG CGG
                       ___ A AGA
GAM3738 LOC51334 5' TCCGCGCTCGGCCGGCC
                                   84589
                                           G CCCC
                    TCCGCGCTCGG CC GC
                    AGGCGCGAGCC GG CG
                        _ CC__
GAM3738 LOC56961 5' TCCCGCGGCCCCCGC 84590
                                        G TCG
                                               С
                    TCC CGC GGCCCCC GC
                    AGG GCG CCGGGGG CG
GAM3738 LOC56961 5' TCCGCCGCGTCCCCGCC 84591
                                          TCGGGC
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TCCGC GC CCCCGCC

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AGGCG CG GGGGGCGG
                      G CA
GAM3738 LOC58509 5' TCCACGCCCTGCTCCTGC 84592
                                            GG C CC
                    TCCGCGCTC GC CC GC
                    AGGTGCGGG CG GG CG
                        A_A A A_
GAM3738 LOC84548 5' TCCACGCTGCTGCTCCCGC 84593
                                            CGG CC
                    TCCGCGCT GC CCCGC
                    AGGTGCGA CG GGGCG
                       CGA A
GAM3738 LOC86010 5' CCCGCGCTGCTCCTCGC 84594
                                           CGG C C
                    TCCGCGCT GC CC CGC
                    GGGCGCGA CG GG GCG
                        АА
GAM3738 LOC90719 5' CCCGCGCTCGGGTTTTCCGC 84595
                                              CCCC
                    TCCGCGCTCGGG CCGC
                    GGGCGCGAGCCC GGCG
                         AAAA
GAM3738 LOC91300 5' TCCGCGCCTTGCTCCTGCC 84596
                                            CGG C CC
                    TCCGCGCT GC CC GCC
                    AGGCGCGG CG GG CGG
                       AA_ A A_
GAM3738 LOC91300 5' TCCGCGCCTTGCTCCTGCC 84596
                                            CGG C CC
                    TCCGCGCT GC CC GCC
                    AGGCGCGG CG GG CGG
                       AA_A A A_
GAM3738 LOC92912 5' CCGCGCTCTCGCGGCTCCGCC 84597
                                              CCC
                    CCGCGCTC G GGC CCGCC
                    GGCGCGAG C CCG GGCGG
                       AGG A_
GAM3739 C18orf1 3' TCCTGGATGTTAGGGGTATGAT 84600
                                             C ATTT__
        TATAG
                       TCCTGGGTGT AGG TTATAG
                    AGGACCTACA TCC
                                    AATATC
                        A CCATACT
GAM3739 DIPA
            3' CTTGGTGTCAGGATTTCT 84601
                                       G
                    CT GGTGTCAGGATTTTT
                    GA CCACAGTCCTAAAGA
                     Α
GAM3739 HNRPF 5' TCTTGGGTGTGGCTTTTT 84602 C
                                           CA A
                    TC TGGGTGT GG TTTTT
```

11 1111111 11 11111

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A __ G
GAM3739 PON1 3' AGTGAGAAGGATTTTTAT 84603
                                       TC
                    GGTG AGGATTTTTAT
                    TCAC TCCTAAAAATA
                      TCT
GAM3739 DIO2 3' TGGGTGGTTTTTATA 84604
                                      GTCA A
                    TGGGT GG TTTTTATA
                    ACCCA CC AAAAATAT
GAM3739 DIO2
            3' TGGGTGGTTTTTATA
                             84604
                                      GTCA A
                    TGGGT GG TTTTTATA
                    ACCCA CC AAAAATAT
GAM3739 FLJ10781 3' TCAGGGTGTCAGATTATA 84605 CT
                                            ATTT
                    TC GGGTGTCAGG TTATA
                    AG CCCACAGTCT AATAT
                     T_
                                             CAG _
GAM3739 FLJ21687 3' TCCTGGGTGTGACTGTATTTAT 84606
                     TCCTGGGTGT GATT TTTATAG
        AG
                    AGGACCCACA CTGA AAATATC
                        ___ CAT
GAM3739 PRO0149 5' TGGCAAGATTTTTAT 84607 GTGT
                    TGG CAGGATTTTTAT
                    ACC GTTCTAAAAATA
GAM3739 LOC138515 5' TCAGGGTGTTCACTTTTAT 84608 CT CAGG
                    TC GGGTGT ATTTTTAT
                    AG CCCACA TGAAAATA
                     T_ AG__
GAM3739 LOC154007 3' TGGGTAACAATTTTTATAG 84609
                                          TCAG
                    TGGGTG GATTTTTATAG
                    ACCCAT TTAAAAATATC
                      TG__
GAM3739 LOC158435 3' TCCTGGTTGCCCATTTTTAT 84610
                                           G AGG
                    TCCTGG TGTC ATTTTTAT
                    AGGACC ACGG TAAAAATA
                      A G__
GAM3739 LOC222112 3' TCCTGGGTTTAGGAGACAATAG 84611
                                             GTC TTTTT
```

TCCTGGGT AGGA ATAG

AG ACCCACA CC AAAAA

```
AGGACCCA TCCT TATC
                      AA_ CTGT_
GAM3740 BCL7A 5' CCTCCTGGGGAGGTGGC
                                      TCGC AAG
                               84614
                   CCTC TGGG GAGG TGGC
                   GGAG ACCC CTCC ACCG
                    G
GAM3740 BGN
           3' CCTCTGGGTGGCTGTGG 84615
                                       CGCGA AA
                   CCTCTGGGT GG GTGG
                   GGAGACCCA CC CACC
                       GA
GAM3740 CHC1
            3' CCTCTGGGCGTGGGTCCGTG 84616
                                         T CGA AA
                   CCTCTGGG CG GG GTG
                   GGAGACCC GC CC CAC
                      AC AGG
GAM3740 HTRA3 3' CCCTGGATGAGGGGGTGG 84617
                                        CGC AA
                   CTCTGGGT GAGG GTGG
                   GGGACCTA CTCC CACC
                      ___ CC
GAM3740 KLK4 3' CCTCTGGGTCTGGGGAAG 84618
                                        GCGA
                   CCTCTGGGTC GGAAG
                   GGAGACCCAG CCTTC
                      ACC
                                        TGGG C
GAM3740 LARS2 3' CCTCATTCATGTGAGGAAGTGG 84619
                   CCTC TCG GAGGAAGTGG
                   GGAG AGT CTCCTTCACC
                    TA ACA
GAM3740 OTOF 5' CCTCTGGGCTGTGAGTCTGTG 84620 CGC GAA
                   CCTCTGGGT GAG GTG
                   GGAGACCCG CTC CAC
                      ACA AGA
GAM3740 SDC4 3' CCCTGGGTTGCAGTGG
                                      C GAGGA
                              84621
                   CTCTGGGT GC AGTGG
                   GGGACCCA CG TCACC
                      Α_
GAM3740 TNFRSF8 3' CTCTGGGTTGGTGAGGGGCG 84622
                                          CGC_ AAGT
                   CTCTGGGT GAGG GGCG
                   GAGACCCA CTCC CCGC
                      ACCA
GAM3740 ACAS2 5' CCTTTGCGGTCGCGGCGGTG 84623 C _ A_ AA
                   CCT TG GGTCGCG GG GTG
```

```
GGA AC CCAGCGC CC CAC
                     ΑG
                          CG _
                                        C AGGAA
GAM3740 FLJ10468 3' CTCTGGGTAGCGGTGG
                                 84624
                    CTCTGGGT GCG GTGG
                    GAGACCCA CGC CACC
                       Т
GAM3740 FLJ10563 5' CCTCCGGGTCGCCCAGGGTGG 84625
                                              G_ AA
                    CCTCTGGGTCGC AGG GTGG
                    GGAGGCCCAGCG TCC CACC
                        GG
GAM3740 KIAA0084 3' CCTCTGGCTGGAGGAGTGG 84626
                                           GTCGC A
                    CCTCTGG GAGGA GTGG
                    GGAGACC CTCCT CACC
                       GAC
GAM3740 KIAA0552 5' TCTGGGTCGCGGGTGGGCG 84627
                                           A AAGT
                    TCTGGGTCGCG GG GGCG
                    AGACCCAGCGC CC CCGC
                        _ AC__
                                         GGTC G
GAM3740 KIAA1987 3' CCTGCTGGCAGGAAGTGG 84628
                    CCT CTG GC AGGAAGTGG
                    GGA GAC CG TCCTTCACC
GAM3740 KLK7
            3' CTGGGTCAAAGGTGGTG 84629
                                         C AA
                    CTGGGTCG GAGG GTG
                    GACCCAGT TTCC CAC
                       _ AC
            3' CTGGGTCAAAGGTGGTG 84629
                                         C AA
GAM3740 KLK7
                    CTGGGTCG GAGG GTG
                    GACCCAGT TTCC CAC
                       _ AC
GAM3740 MLN64 3' TCTGGCTCTGGAAGTGG
                                        G GCGA
                                 84630
                    TCTGG TC GGAAGTGG
                    AGACC AG CCTTCACC
                      G A
GAM3740 SPINT1 5' CCTCTGGGTTCCGAGGGTG 84631
                                           CG AA
                    CCTCTGGGT CGAGG GTG
                    GGAGACCCA GCTCC CAC
                       AG
GAM3740 LOC122970 5' CCCCTGGCGGGAGGAAGTGGCG 84632
                                              GT C
                    CCTCTGG CG GAGGAAGTGGCG
```

```
GGGGACC GC CTCCTTCACCGC
                       __ C
GAM3740 LOC201164 3' CTTTGGGAGGCGGAAGTGG 84633 C TC GA
                    CT TGGG GC GGAAGTGG
                    GA ACCC CG CCTTCACC
                     A TC __
GAM3740 LOC206372 3' CTCTGGGTTCGAGGGAAG 84634
                                            CG
                    CTCTGGGT CGAGG AAG
                    GAGACCCA GCTCC TTC
                       A C
GAM3740 LOC219404 5' TCTGGATCCTCAGGTGGTG 84635
                                            G G AA
                    TCTGGGTC C AGG GTG
                    AGACCTAG G TCC CAC
                       GA AC
GAM3740 LOC221692 3' CTACTGAGAGTTGAGGAAGTGG 84636 _ TCGC
        CG
                      CT CTGGG GAGGAAGTGGCG
                    GA GACTC CTCCTTCACCGC
                     T TCAA
GAM3740 LOC256669 5' GGGCCCTCGTGGGGAGGTGGCG 84637
                                              G_ A__ A
                    GGGTC CG GGA GTGGCG
                    CCCGG GC CCT CACCGC
                      GA ACC C
GAM3740 LOC51082 5' TCTGGATCCTCAGGTGGTG 84635
                                            G G AA
                    TCTGGGTC C AGG GTG
                    AGACCTAG G TCC CAC
                       GA_ AC
GAM3740 LOC92249 5' CCCTGGGTTCCGAGGTGGTG 84638
                                             CG AA
                    CTCTGGGT CGAGG GTG
                    GGGACCCA GCTCC CAC
                       AG AC
GAM3741 FKBP1A 3' AAGGATTTGTCATGATGGCTGT 84641
                                            A A_____ TATA
        ATACA
                       GATTT TC
                                 CTG CA
                    CTAAA AG GAC GT
                      C TACTACCIII ATAT
GAM3741 GALNT1 3' TGAAGATTTATTGCTGT 84642
                                        G
                                            CA
                    TGAAG ATTTAT CTGT
                    ACTTC TAAATA GACA
                         AC
GAM3741 GAS7 3' TGCAGGACAACTGTATA 84643 A TTATC
                    TG AGGAT ACTGTATA
```

| | | AC TCCTG TGACATAT |
|-----------|----------------|--|
| | | G T |
| GAM3741 | RAD50 3' T | GATGGATTTATCAACAGCTGT 84644 A A TATA |
| | ATC | A GGATTTATC CTG C |
| | | |
| | | T CCTAAATAG GAC G |
| | | A TTGTCIII ATAT |
| 0.4140744 | DADEO OLT | |
| GAM3741 | | GATGGATTTATCAACAGCTGT 84644 A A TATA |
| | ATC | A GGATTTATC CTG C |
| | | |
| | | T CCTAAATAG GAC G |
| | | A TTGTCIII ATAT |
| GAM3741 | UBE3A 3' T | AAAGGATTTGTTCATATAT 84645 A_ C |
| | | TGAAGGATTT TCA TGTAT |
| | | |
| | | ATTTCCTAAA AGT ATATA |
| | | CA |
| GAM3741 | LIBE3A 3' T | AAAGGATTTGTTCATATAT 84645 A C |
| C. avior | 00000 | TGAAGGATTT TCA TGTAT |
| | | |
| | | ATTTCCTAAA AGT ATATA |
| | | |
| 0.4440744 | LIDEOA OLT | CA _ |
| GAM3/41 | OBE3A 3. I | AAAGGATTTGTTCATATAT 84645 A_ C |
| | | TGAAGGATTT TCA TGTAT |
| | | |
| | | ATTTCCTAAA AGT ATATA |
| | | CA _ |
| GAM3741 | BC022889 3' | TGAAGGATTTGACGTTTGAGCT 84646 ATCA TATA |
| | GTATACA | GATTT CTG CA |
| | | |
| | | CTAAA GAC GT |
| | | CTGCAAACTCIII ATAT |
| GAM3741 | FLJ20275 3' 1 | rgaaggatttaccattaagctg 84647 a tata |
| | TATACA | GGATTTATC CTG CA |
| | 17(17(0)) | |
| | | |
| | | |
| 0.1110744 | EL 10007E 01 7 | TAATTCIII ATAT |
| GAM3/41 | FLJ20275 3° 1 | rgaagatgcaccactgtata 84648 |
| | | TGAAG AT TATCACTGTATA |
| | | |
| | | ACTTC TA GTGGTGACATAT |
| | | _ C |
| GAM3741 | FLJ21820 3' 7 | FAAAGGATCTGTGTAC 84649 TTATCA A |
| | | TGAAGGAT CTGT TAC |
| | | |
| | | ATTTCCTA GACA ATG |
| | | C |
| GAM3741 | FLJ23441 3' A | AAGGATTTATCACAAAGTATA 84650 T |
| | | AAGGATTTATCAC GTATA |

TTCCTAAATAGTG CATAT TTT GAM3741 HARS2 3' GAGGGATTTATTGTATA 84651 A CAC GA GGATTTAT TGTATA CT CCTAAATA ACATAT C GAM3741 KIAA1786 3' TGAAGAATTTATCACACAC 84652 **TGT** TGAAGGATTTATCAC ATAC ACTTCTTAAATAGTG TGTG GAM3741 LOC143196 5' GAAGGATTTATTGCGCCCAG 84653 CAC ATA GAAGGATTTAT TGT CAG CTTCCTAAATA ACG GTC

__ CGG

GAM3742 ENTPD3 5' CTGCCGCAGAGGCGGCCCGCG 84656 C AT CTGCCGCA AG GCG CCCGCG GACGGCGT TC CGC GGGCGC

C _ C_

GAM3742 MARK3 5' TGCCTCAGGGCGCCCCGCGA 84657 GCA C A TGCC AG GCG TCCCGCGA

ACGG TC CGC GGGGCGCT

AG_ C _

GAM3742 NEK4 5' TGCTGGGGCCCGGCCCGCAC 84658 CGCAA G AT TGC GC CG CCGCGAC

ACG CG GC GGGCGCTG

ACCC_ G C_

GAM3742 TRRAP 5' CCTGCAGGCCCGGCCCGCGAC 84659 A G AT CC GCA GC CG CCCGCGAC

GG CGT CG GC GGGCGCTG

A C G C_

GAM3742 BIRC5 5' CTGCCAACGGGTCCCGCGA 84660 CAA CGA

CTGCCG GCG TCCCGCGA

GACGGT TGC AGGGCGCT

__ CC_

GAM3742 C21orf4 5' CTGCCGGCGTCCCGCG 84661 CAAGC A

CTGCCG GCG TCCCGCG

GACGGC CGC AGGGCGC

GAM3742 FLJ10193 3' CTGCCGCAAGTGCAAAGGC 84662 C TCCC CTGCCGCAAG GCGA GC

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GACGGCGTTC CGTT CG
                       A TC__
GAM3742 HSPC182 5' GCCGCAAATCCCGCG
                               84663 AGCGC
                   GCCGCA GATCCCGCG
                   CGGCGT TTAGGGCGC
GAM3742 LOC151648 5' CTGCCGCAGGCGCGTCCAGAAC 84664
                                          A A C__
        GA
                    CTGCCGCA GCGCG TCC GCGA
                   GACGGCGT CGCGC AGG TGCT
                      C TCT
GAM3742 LOC256982 3' CTGCCGGCGAGTCACCCGCGAC 84665
                                           CAA CGAT
                   CTGCCG GCG CCCGCGAC
                   GACGGC CGC GGGCGCTG
                      TCAGT
GAM3742 LOC58525 5' CTGCCGCAGGTGGGAGCGCGCG 84666
                                                  ATCCC
        TGGC
                     CTGCCGCA AGCGCG GC
                        GACGGCGT TCGCGC CG
                      CCACCC
                             GCAC
GAM3743 CDC25A 5' TCGGCCGCGCGCCACCGGCGCC 84669 A ACCA
                    TC GCC CGC CCGC GCGCCCG
        CG
                   AG CGG GCG GGTG CGCGGGC
                    C C GC
GAM3743 CIT 3' TCAGCCACCTGCCCCTCC 84670
                                      AC GCGCG
                   TCAGCCACC GCCC CC
                   AGTCGGTGG CGGG GG
                      A GA
                                        C C
GAM3743 CNGB1 3' AGCCACCATGCCCGGCA
                               84671
                   AGCCACCA GCCCG GCG
                   TCGGTGGT CGGGC CGT
                      Α _
GAM3743 COL15A1 5' AGCGCTGGCCCGCGCGCTCG 84672
                                         CACCAC C
                   AGC GCCCGCGCGC CG
                      TCG CGGGCGCGCG GC
                    CGAC__
                             Α
GAM3743 CSPG2 5' TCGGCTGTTGCGTCCGCACGCC 84673 A CACCA C
                   TC GC CG CCGCGCGCC
                   AG CG GC GGCGTGCGG
                    C ACAAC A
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5' TCGGCCACCACCCCTCG 84674 A

TC GCCACCAC CCC CG

G

GAM3743 G6PD

```
AG CGGTGGTG GGG GC
                    C _ A
GAM3743 GNB3 5' TCAGCTGCGACGCCCGCGCCC 84675
                                         CACC
                                                G
                   TCAGC ACGCCCGCGC CC
                   AGTCG TGCGGGCGCG GG
                     ACGC
                                        CAC CGC G
GAM3743 HCN2 3' TCAGCCACTGGGCCGCCC 84676
                   TCAGCCAC GCC GCCCC
                   AGTCGGTG CGG CG GGG
                      ACC
GAM3743 HIRA
           5' CAGCCGCCACCGCGC 84677
                                      A AC
                   CAGCC CC GCCCGCGC
                   GTCGG GG TGGGCGCG
                     С
GAM3743 IFNGR2 5' TCGGCCGCCCGCGCCCCC 84678 A ACCAC
                                                G
                   TC GCC GCCGCGC CCC
                   AG CGG CGGGCGCG GGG
                    C ____
                            G
GAM3743 ILF1 5' TCGGCCGCGCGCACC 84679 A ACCAC C
                   TC GCC GCC GCGCGCC
                   AG CGG CGCGTGG
GAM3743 LRRC2 3' AGTCACCGCGCCCGGCCC 84680 C A
                                            CGC
                   AG CACC CGCCCG GCCC
                   TC GTGG GCGGGC CGGG
                    A C
                                          C GC GC
GAM3743 NESG1 5' TCAGCCACACGCCCTGACTCCG 84681
                   TCAGCCAC ACGCCC GC CCG
                   AGTCGGTG TGCGGG TG GGC
                      _ AC A_
GAM3743 ODC1
            5' TCGGCCGCCCCGCCGCGCCCG 84682 A A ACG
                   TC GCC CC CCCGC GCGCCCG
                   AG CGG GG GGGCG CGCGGGC
                    C C ___ G
GAM3743 PSMD5 3' AGCCACCGCGCCCAGCCC 84683
                                        Α
                                           CGC
                   AGCCACC CGCCCG GCCC
                   TCGGTGG GCGGGT CGGG
                      С
GAM3743 RENBP 5' TCAGCTGACACAGCCGCGCCCG 84684
                                          CAC _ CGC
```

TCAGC CAC GCC GCGCCCG

```
AGTCG GTG CGG CGCGGGC
                     ACT T ____
GAM3743 TAF1 3' AGCCACCACGCCTGGCC 84685
                                         CGCGC
                   AGCCACCACGCC GCC
                   TCGGTGGTGCGG CGG
                        AC
GAM3743 TAF1 3' AGCCACCACGCCTGGCC
                                84685
                                         CGCGC
                   AGCCACCACGCC GCC
                   TCGGTGGTGCGG CGG
                        AC
GAM3743 TNFRSF12 5' TCAGCCCGCGCCCGCAGGGCC 84686
                                            ΑА
                                                 С
        CG
                     TCAGCC CC CGCCCGCG GCCCG
                   AGTCGG GG GCGGGCGT CGGGC
                      С
                           CC
GAM3743 ZFP103 5' GCCGCCGCAACGCCGCGCCCG 84687 A CGC
                   GCC CC ACGCC GCGCCCG
                   CGG GG TGCGG CGCGGGC
                    C CGT
GAM3743 ALTE 3' AGCCACCACGCCCGGCCACCG 84688
                                           C GC
                   AGCCACCACGCCCG GC CCG
                   TCGGTGGTGCGGGC CG GGC
                         _ GT
GAM3743 BNIP-S 3' AGCCACCGCGCCCGACCACC 84689
                                         A _ G
                   AGCCACC CGCCCG C CGCC
                   TCGGTGG GCGGGC G GTGG
                      С
                        T _
GAM3743 CDC14B 5' GCCCCGCGCGCCCCGCGCCCCG 84690
                                           ΑΑ
                   GCC CC CGCCGCGCGCCCG
                   CGG GG GCGGGCGCGGGC
                    _ CGC
GAM3743 CDC14B 5' GCCCCGCGCGCCCCGCGCCCCG 84690
                                           A A__
                   GCC CC CGCCGCGCGCCCG
                   CGG GG GCGGGCGCGGGC
                     _ CGC
GAM3743 CDC14B 5' GCCCCGCGCGCCCCGCGCGCCCC 84690
                                           A A__
                   GCC CC CGCCGCGCGCCCG
                   CGG GG GCGGGCGCGGGC
                    _ CGC
GAM3743 cerk 3' AGCCACCGCGCCCAGCC 84691
                                      Α
                                          CGC
                   AGCCACC CGCCCG GCC
```

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TCGGTGG GCGGGT CGG
                       C
GAM3743 DSIPI 5' GCCACCACGCTGGCTCCG 84692
                                          CCGC GC
                    GCCACCACGC GC CCG
                    CGGTGGTGCG CG GGC
                        AC__ A_
GAM3743 EHM2
            5' TCGGCCGCCCGCGCC 84693
                                        A ACCAC
                    TC GCC GCCGCGC GCC
                    AG CGG CGGGCGCG CGG
                              G
GAM3743 FLJ10737 3' TCAGCCACCACCTGTGCGGCGC 84694
                                              GCCC _
                    TCAGCCACCAC GCG CGC
                    AGTCGGTGGTG CGC GCG
                        GACA C
GAM3743 FLJ11637 3' AGCCACCGCGCCCGGCCC 84695
                                              CGC
                    AGCCACC CGCCCG GCCC
                    TCGGTGG GCGGGC CGGG
                       С
GAM3743 FLJ12294 3' AGCCACCGCGCCCGGCC
                                             CGC
                                  84696
                    AGCCACC CGCCCG GCC
                    TCGGTGG GCGGGC CGG
GAM3743 FLJ13952 5' CCAGCTGCTCCGCGCGCC 84697
                                          CACCAC
                    TCAGC
                          GC CCGCGCGC C
                    GGTCG CG GGCGCGCG G
                      A A
GAM3743 FLJ14345 3' AGCCACCACGCCCGGCG
                                             С
                                  84698
                    AGCCACCACGCCCG GCG
                    TCGGTGGTGCGGGC CGC
GAM3743 FLJ14346 3' AGCCACCGCGCCCAGCCC 84683
                                              CGC
                    AGCCACC CGCCCG GCCC
                    TCGGTGG GCGGGT CGGG
GAM3743 FLJ14547 5' TCAGCAGCCACGCGCC
                                 84699
                                         CACCAC C
                    TCAGC
                           GCC GCGCGCC
                    CGG TGCGCGG
                    AGTCG
                      \mathsf{T}_{-}
GAM3743 FLJ20059 3' AGCCACCACGCCCAGCC
                                  84700
                                             CGC
                    AGCCACCACGCCCG GCC
```

CGC

```
GAM3743 FLJ20413 3' AGCCACCGCGCCCGGCC 84696 A

AGCCACC CGCCCG GCC

|||||| ||||| |||

TCGGTGG GCGGCC CGG
```

С

GAM3743 FLJ20499 5' CAGCCACCGCGGACGCCC 84701 A CCCGC CAGCCACC CG GCGCCC

GTCGGTGG GC TGCGGG

СС

GAM3743 FLJ20700 3' AGCCACCATGCCCGGCCCA 84702 C CGC AGCCACCA GCCCG GCCCG

1111111 11111 11111

TCGGTGGT CGGGC CGGGT

Α

GAM3743 FLJ21313 5' TCAGACTTCCGCGCGCC 84703 CCACC GC

TCAG AC CCGCGCGCC

AGTC TG GGCGCGCG

____ AA

GAM3743 FLJ21687 3' AGCCACCACGCCTGGCC 84685 CGCGC

AGCCACCACGCC GCC

TCGGTGGTGCGG CGG

AC

GAM3743 FLJ21777 3' AGCCACCGCGCCCGGCC 84696 A CGC

AGCCACC CGCCCG GCC

TCGGTGG GCGGGC CGG

С

GAM3743 FUSIP1 3' AGCCACCACGCCCAGCC 84700 CGC

AGCCACCACGCCCG GCC

TCGGTGGTGCGGGT CGG

GAM3743 HSPC195 5' GCCGCCGCCGCCGCGCGCCCC 84704 A A_ C

GCC CC CGCC GCGCGCCCG

CGG GG GCGG CGCGCGGCC

C CG

GAM3743 KIAA0633 3' TCAGCCACCCGCCACCC 84705 A CGCGC

TCAGCCACC CGCC GCCC

AGTCGGTGG GCGG TGGG

GAM3743 KIAA0720 3' TCAGCCCGCGCGCGCGGGGCC 84686 A A C_
CG TCAGCC CC CGCCCGCG GCCCG

```
AGTCGG GG GCGGGCGT CGGGC
                       _ C
                             CC
GAM3743 KIAA0794 3' AGCCACCGCGCCCGGCCTTCC 84706
                                                 C GC
                                              Α
                     AGCCACC CGCCCG GC CC
                     TCGGTGG GCGGGC CG GG
                          _ GAA
GAM3743 KIAA1198 3' TCAGCCACCAGGTCCTCCAC 84707
                                              CG_ CG
                     TCAGCCACCA CC CGC
                     AGTCGGTGGT GG GTG
                         CCA AG
GAM3743 KIAA1202 3' AGCCACCATGCCCGGCC
                                   84708
                                               CGC
                     AGCCACCA GCCCG GCC
                     TCGGTGGT CGGGC CGG
GAM3743 KIAA1941 3' AGCCACCATGCCCGGCCTCC 84709
                                             C C GC
                     AGCCACCA GCCCG GC CC
                     TCGGTGGT CGGGC CG GG
                        A GA
GAM3743 KIAA1951 3' GCCACCACAGGCGCCC
                                            CCCGC
                                   84710
                     GCCACCACG GCGCCC
                     111111111 111111
                     CGGTGGTGT CGCGGG
                        С
GAM3743 MGC4840 3' AGCCATCACGCCCGGCCCA 84711
                                                CGC
                     AGCCA CACGCCCG GCCCG
                     TCGGT GTGCGGGC CGGGT
                                          C CGCGC
GAM3743 NBR2
             3' AGCCACCATGCCTGCCC
                                  84712
                     AGCCACCA GCC GCCC
                     TCGGTGGT CGG CGGG
                        A A___
GAM3743 phorbolin-1 3' AGCCACCGCGCCCGGCCCA 84713
                                                CGC
                     AGCCACC CGCCCG GCCCG
                     TCGGTGG GCGGGC CGGGT
GAM3743 PP591
             5' AGCCACCACGCCTGGCC
                                  84685
                                            CGCGC
                     AGCCACCACGCC
                                   GCC
                     TCGGTGGTGCGG
                                   CGG
                         AC_{-}
GAM3743 PRO1777 3' AGCCACCACGCTCACCC
                                   84714
                                             CCGCG
                     AGCCACCACGC CGCCC
```

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TCGGTGGTGCG GTGGG
                        Α
GAM3743 PRO1853 3' AGCCACCACGCCCAGCC
                                  84700
                                            CGC
                    AGCCACCACGCCCG GCC
                    TCGGTGGTGCGGGT CGG
GAM3743 PRO2015 3' AGCCACCACGCCTGGCC
                                           CGCGC
                                  84685
                    AGCCACCACGCC
                                 GCC
                    TCGGTGGTGCGG
                                  CGG
                        AC
GAM3743 PRO2730 3' AGCCACCGCGCCCAGCC
                                  84691
                                             CGC
                    AGCCACC CGCCCG GCC
                    TCGGTGG GCGGGT CGG
GAM3743 PTD012 3' TCAGCCACCATGCCCGGAC 84715
                                           C C
                    TCAGCCACCA GCCCG GC
                    AGTCGGTGGT CGGGC TG
                        A C
GAM3743 QKI
           5' GCCGGCACCGCGCGCTCG 84716
                                       ACCAC
                                                C
                    GCC GC CCGCGCGC CG
                    CGG CG GGCGCGCG GC
                     C T
GAM3743 RGS7
            5' CAGCCGCCACTCGCGCCC 84717
                                        A GCCCG
                    CAGCC CCAC CGCGCCC
                    GTCGG GGTG GCGCGGG
                      C A
            3' AGCCACCACGCCTGGCCAGC 84718
                                            C GC
GAM3743 RNO2
                    AGCCACCACGCC GC GC
                    TCGGTGGTGCGG CG CG
                        AC GT
GAM3743 SCYA5 3' AGCCACCACGTCCAGCC
                                          C CGC
                                 84719
                    AGCCACCACG CCG GCC
                    TCGGTGGTGC GGT CGG
                        Α
GAM3743 SLC12A5 3' TCGGCCGCCCGCGCCCCA 84720 A ACCAC
                                                  G
                    TC GCC GCCGCGC CCCG
                    AG CGG CGGGCGCG GGGT
                     С
GAM3743 SMAP-5 3' AGCTACCACGCCCGGCC
                                 84721
                                        C
                                            CGC
                    AGC ACCACGCCCG GCC
```

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TCG TGGTGCGGGC CGG
                      Α
GAM3743 SPATA1 5' CAGCCGCCGCGCCCACCG 84722
                                          ΑА
                                                G
                    CAGCC CC CGCCCGC CG
                    GTCGG GG GCGGGTG GC
                      CC
                                           CCC _
GAM3743 SSH-3 3' GCCACCACGGCACTGCCC 84723
                    GCCACCACG GCGC GCCC
                    CGGTGGTGC CGTG CGGG
GAM3743 SYNJ2 5' CAGCTCCCCGCGCGCCC 84724
                                         CACCACG
                    CAGC
                           CCCGCGCGCCC
                    IIII
                        GTCG
                           GGGCGCGCGG
                      AG
GAM3743 TA-LRRP 3' AGCCACCACGCCCGGCC 84725
                                             CGC
                    AGCCACCACGCCCG GCC
                    TCGGTGGTGCGGGC CGG
GAM3743 ZF5128 3' TCAGCCACCACGTCCTCCCC 84726
                                              C GCGCG
                    TCAGCCACCACG CC CCC
                    AGTCGGTGGTGC GG GGG
                         A AGG
                                               CGC _
GAM3743 ZFP106 3' AGCCACCACGCCCGGCCACG 84727
                    AGCCACCACGCCCG GCC CG
                    TCGGTGGTGCGGGC CGG GC
                            Т
GAM3743 ZNF84 5' AGCCGAGTCGCGCCCGCGCGCC 84728
                                            ACCA
        CG
                      AGCC CGCCGCGCGCCCG
                    IIII
                       TCGG
                         GCGGGCGCGCGGC
                      CTCAGC
GAM3743 LOC116225 5' CCGCCGCCGCCTCGCGCCCG 84729
                                            A A_ CG
                    CC CC CGCC CGCGCCCG
                    11 11 1111 11111111
                    GG GG GCGG GCGCGGGC
                     C CG A_
GAM3743 LOC124044 3' TCAGCCACTGCCCGTTCC 84730
                                            CAC CGCG
                    TCAGCCAC GCCCG CC
                    AGTCGGTG CGGGC GG
                       A__ AA__
GAM3743 LOC145333 3' AGCCACCGCGCCCGGCC
                                    84696
                                               CGC
                    AGCCACC CGCCCG GCC
```

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TCGGTGG GCGGGC CGG
                       C
GAM3743 LOC145748 5' CAGCCGCCACCGCGCC 84731 A GCCCG
                    CAGCC CCAC CGCGCC
                    GTCGG GGTG GCGCGG
                      C
GAM3743 LOC146713 3' AGCCACCGCGCCCGGCCCG 84732
                                                CGC
                    AGCCACC CGCCCG GCCCG
                    TCGGTGG GCGGGC CGGGC
GAM3743 LOC147165 3' TCAGCCGCCCACGCCTCTGCTC 84733
                                                 C__ G
                                             Α
        G
                     TCAGCC CCACGCC GC CG
                    AGTCGG GGTGCGG CG GC
                       CG
                           AGA A
GAM3743 LOC149175 3' AGCCACCACGCCCAGCC
                                   84700
                                              CGC
                    AGCCACCACGCCCG GCC
                    TCGGTGGTGCGGGT CGG
GAM3743 LOC150275 5' TCGGCCGCCCGCGTCCCCAGGC 84734 A A A G C
        CCG
                      TC GCC CC CGC CC CG GCCCG
                    AG CGG GG GCG GG GT CGGGC
                     C C _ CA G C
GAM3743 LOC150343 3' AGCCACCATGCCTGGCCC 84735
                                            C CGCGC
                    AGCCACCA GCC GCCC
                    TCGGTGGT CGG CGGG
                       A AC
GAM3743 LOC151904 3' AGCCACCACGCCCAGCC
                                              CGC
                                   84700
                    AGCCACCACGCCCG GCC
                    TCGGTGGTGCGGGT CGG
GAM3743 LOC152860 3' AGCCACCGCGCCCAGCC
                                   84691
                                               CGC
                    AGCCACC CGCCCG GCC
                    TCGGTGG GCGGGT CGG
GAM3743 LOC153077 3' AGCCACCATGCCCGGCA
                                   84671
                                              C
                    AGCCACCA GCCCG GCG
                    TCGGTGGT CGGGC CGT
GAM3743 LOC155066 5' TCAGCCCCGCGCCCGCACA 84736
                                            A A
```

TCAGCC CC CGCCGCGCG

```
AGTCGG GG GCGGGCGTGT
                       _ C
GAM3743 LOC158292 5' AGTCACCGCGCCCAGCTCCG 84737 C A C GC
                    AG CACC CGCCCG GC CCG
                    TC GTGG GCGGGT CG GGC
                     A C _ A_
GAM3743 LOC200743 5' TCGGCACCGCCCGCGC
                                   84738 A C AC
                    TC GC ACC GCCCGCGC
                    AG CG TGG CGGGCGCG
                     C _ _
GAM3743 LOC219673 3' AGCCACCGCGCCCGGCC 84696
                                               CGC
                    AGCCACC CGCCCG GCC
                    TCGGTGG GCGGGC CGG
GAM3743 LOC221042 3' TCAGCCACTGTGCACTGCCAGA 84739
                                              ____ CGCGC
        GCC
                      TCAGCCAC CAC GCC GCC
                    AGTCGGTG GTG CGG CGG
                       ACAC A TCT__
GAM3743 LOC253927 3' AGCCACCACGCCTGGCC
                                   84685
                                             CGCGC
                    AGCCACCACGCC GCC
                    TCGGTGGTGCGG CGG
                         AC
                                                CGC GC
GAM3743 LOC254387 3' AGTCACCACGCCTGGCCTCCG 84740 C
                    AG CACCACGCC GC CCG
                    TC GTGGTGCGG CG GGC
                         AC_ GA
GAM3743 LOC255971 3' AGCCACCGCGCCCGGCACC 84741
                    AGCCACC CGCCCG GCGCC
                    TCGGTGG GCGGGC CGTGG
                       C
GAM3743 LOC256158 5' TCAGCCACGCACGTGTAGGTGC 84742
                                                CCCGCGC
        CCG
                      TCAGCCAC CACG
                                     GCCCG
                    AGTCGGTG GTGC
                                   CGGGC
                       C ACATCCA
GAM3743 LOC51281 5' CAGCCACCGCGGACGCCC 84701
                                            A CCCGC
                    CAGCCACC CG GCGCCC
                    GTCGGTGG GC TGCGGG
                       C C_{-}
GAM3743 LOC51336 3' CCAGCCACCATGCCCGGC 84743
                    TCAGCCACCA GCCCG GC
```

```
GGTCGGTGGT CGGGC CG
                        Α
GAM3743 LOC89890 3' AGCCACCGCGCCCAGCC 84691 A CGC
                    AGCCACC CGCCCG GCC
                    TCGGTGG GCGGGT CGG
                       C
GAM3743 LOC89958 3' AGCCACCACGCCTGGCC
                                            CGCGC
                                  84685
                    AGCCACCACGCC GCC
                    TCGGTGGTGCGG CGG
                        AC
GAM3743 LOC91547 3' AGCCACCATGCCTGGCCCA 84744
                                           C CGCGC
                    AGCCACCA GCC GCCCG
                    TCGGTGGT CGG CGGGT
                       A AC
GAM3743 LOC92231 3' TCAGCCACCGCGCCTGGC 84745
                                           A C
                    TCAGCCACC CGCC GC
                    AGTCGGTGG GCGG CG
                       C AC
GAM3743 LOC93512 3' TCAGCCGCCCACGCCTCTGCTC 84733
                                            A C G
                    TCAGCC CCACGCC GC CG
        G
                    AGTCGG GGTGCGG CG GC
                      CG
                           AGA A
GAM3744 HS2ST1 3' TCAGAAGCACCCAATAT 84748
                                       T TTCTC
                    TCAGA GC TCCAATAT
                    AGTCT CG GGGTTATA
                      TT
GAM3744 SCA1
            3' GAAGCCTCCAATGTATC 84749 T TTCT
                    GA GC CTCCAAT TATC
                    CT CG GAGGTTA ATAG
                    T
                           С
GAM3744 FLJ12604 3' TCAGATGCTTCTTCCAA
                                          С
                                 84750
                    TCAGATGCTTCT TCCAA
                    AGTCTACGAAGA AGGTT
GAM3744 HSPCAL3 3' TCAACTTTTTTCTCCAATAT 84751
                                        GAT C__
                    TCA GCTT TCTCCAATAT
```

GAM3744 KIAA0391 3' AATGCTCTCAATATAT

AAA

AGT TGAA AGAGGTTATA

GATGCT CTC AATATAT

84752

T TCC

TTACGA GAG TTATATA

GAM3744 MYOZ2 3' TCATATGCTTCTTCAATTATAT 84753 G CTC _ TCA ATGCTTCT CAAT ATAT AGT TACGAAGA GTTA TATA A__ A GAM3744 TP53INP1 3' GATGCCATTTCTAATATATC 84754 TCTC C GATGCT TC AATATATC CTACGG AG TTATATAG TAA A GAM3744 TP53INP1 3' GATGCCATTTCTAATATATC 84754 TCTC C GATGCT TC AATATATC CTACGG AG TTATATAG TAA A GAM3744 LOC147622 5' TCAGATACTTTTTGGTTTATAT 84755 CTCTCCAA C TCAGATGCTT TATATC AGTCTATGAA ATATAG AAACCAA GAM3744 LOC150225 3' TCAGGTGCTTCTCTTACC 84756 TCAG TGCTTCTCT CC AGTC ACGAAGAGA GG С ΑT GAM3744 LOC196484 5' CAGATGCTTTTCTCAAAC 84757 CC CAGATGCTT TCTC AAT GTCTACGAA AGAG TTG A T CC GAM3744 LOC91069 3' CAGATGCTTTTCTCAAAT 84758 CAGATGCTT TCTC AAT GTCTACGAA AGAG TTA А Т GAM3745 AKAP2 3' TAAGTGGTTAACATACACA 84761 TAA TGGTTAA ATATACA ATT ACCAATT TATGTGT G GAM3745 CRI1 3' AAATGGTTATGACAATG 84762 **AATAT** AAATGGTTA ACAATG TTTACCAAT TGTTAC AC_{-} GAM3745 DHFR 3' AAATGGTTAAGTACAAT 84763 **ATA** AAATGGTTAA TACAAT

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TTTACCAATT ATGTTA
                         C__
                                           T_ _
GAM3745 DLD
            3' GGTTAAATAAAACAAGTGA 84764
                     GGTTAAATA ACAA TGA
                     CCAATTTAT TGTT ACT
                         TT C
GAM3745 ITM2B 3' TAAATAGTTAAATATTTGA 84765
                                               CAA
                     TAAATGGTTAAATATA TGA
                     ATTTATCAATTTATAT ACT
                            AA
GAM3745 NT5C2 3' ATGGAAGAAAATATACAATG 84766
                                           TT
                     ATGG AAATATACAATG
                     TACC TTTATATGTTAC
                       TTCT
GAM3745 PFN2
             3' TGGTTAACATACAAATGA 84767
                     TGGTTAA TATACAA TGA
                     ACCAATT GTATGTT ACT
                           Т
GAM3745 PFN2
             3' TGGTTAACATACAAATGA 84767
                     TGGTTAA TATACAA TGA
                     ACCAATT GTATGTT ACT
GAM3745 RB1CC1 3' TAAATGGTTAATGTGCAATGA 84768
                                               ATATA
                     TAAATGGTTAA CAATGA
                     ATTTACCAATT GTTACT
                          ACAC_
GAM3745 DIS3 3' ATGGCCAAATATACGATGA 84769
                     ATGGTTAAATATAC ATGA
                     TACCGGTTTATATG TACT
                           C
GAM3745 DKFZp434B0417 3' ATGTGTTAAATGTACAATG 84770
                     ATG GTTAAAT TACAATG
                     TAC CAATTTA ATGTTAC
                      Α
GAM3745 HSPC052 3' TGATGGTTAAACATATTATAAT 84771 A
                                                  C____
         G
                      A ATGGTTAAATATA AATG
                     A TACCAATTTGTAT TTAC
                      С
                            AATA
GAM3745 KIAA1247 3' TAAATAGTCACATATATACAAT 84772
                                               Α__
         GA
                      TAAATGGTTA ATATACAATGA
```

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ATTTATCAGT TATATGTTACT
GTA
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GAM3745 KIAA1497 5' TGATGGACCGCATATACAATG 84773 A TTAA_

A ATGG ATATACAATG

A TACC TATATGTTAC

C TGGCG

GAM3745 RBM12 3' TAAAGGTACATACAATG 84774 T TAA

TAAA GGT ATATACAATG

ATTT CCA TGTATGTTAC

GAM3745 UBE2D1 3' CAAATGGTTTCATGGTACAATG 84775 AA A_

A TAAATGGTT AT TACAATGA

GTTTACCAA TA ATGTTACT

AG CC

GAM3745 LOC51133 5' AAATGGTTATTTCAACAATG 84776 AATAT

AAATGGTTA ACAATG

TTTACCAAT TGTTAC

AAAGT

GAM3746 A2M 3' GAACAGGACTCCAGCAAAGCAC 84779 AA GAACT

GAACA AC CAAAGCAC

CTTGT TG GTTTCGTG

CC AGGTC

GAM3746 ABCD2 5' CGAACAAAACCGGCTCTAGC 84780 GAA AA

CGAACAAAAC CTC AGC

GCTTGTTTTG GAG TCG

GCC A_

GAM3746 CDKN1B 5' CGAACAAAACAAGCGC 84781 CTCAAA

CGAACAAAACGAA GC

GCTTGTTTTGTTT CG

CG

GAM3746 CSDA 3' GAACAAAAACGGAAAAAAAGC 84782 _ AACTC_

Α

GAACAAAA CG AAAGCA

CTTGTTTT GC TTTCGT

T CTTTTT

GAM3746 GARS 5' ACGAGAACCTTCAAAGCA 84783 ACAAAAC __

ACGA GAAC TCAAAGCA

TGCT CTTG AGTTTCGT

GA

GAM3746 SELP 3' AACAGGTGAGTCAAAGCAC 84784 AAAC AC

AACA GA TCAAAGCAC

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TTGT CT AGTTTCGTG
                      CCA_ C_
GAM3746 SNAP25 3' GAACAAAAGACACAAAG 84785 C ACT
                    GAACAAAA GA CAAAG
                    CTTGTTTT CT GTTTC
                       _ GT
GAM3746 SNAP25 3' GAACAAAAGACACAAAG 84785 C ACT
                    GAACAAAA GA CAAAG
                    CTTGTTTT CT GTTTC
                       GT
GAM3746 ZFP36L1 3' GAACAAAATTAACAAAAAAAA 84786
                                           CG TC___
        CA
                     GAACAAAA AAC AAAGCA
                    CTTGTTTT TTG TTTCGT
                       AA TTTTT
GAM3746 DNAJC5 3' ACCGGACGGCCTCAAAGCAC 84787 AAA AA
                    AC ACG CTCAAAGCAC
                    TG TGC GAGTTTCGTG
                     GCC CCG
GAM3746 EVI5 3' CGAACAAAAATCCCCAAAGCAC 84788
                                           CGAA
                    CGAACAAA CTCAAAGCAC
                    GCTTGTTTT GGGTTTCGTG
                        TAG
GAM3746 FIGN 3' CAAACAAAAAATAAAGCA 84789
                                         CGAACTC
                    CGAACAAAA AAAGCA
                    GTTTGTTTT TTTCGT
                        TTA
GAM3746 FLJ12526 5' ACAAACAAAGTCCCGCGGAGCA 84790
                                          ACGAA AA__
        C
                     ACGAACAAA CTC AGCAC
                    111111111 1111 11111
                    TGTTTGTTT GGG TCGTG
                        CA___ CGCC
GAM3746 FLJ22054 3' ACAGACAAGGAATCAAAGCAC 84791 A AAC C
                    ACG ACAA GAA TCAAAGCAC
                    TGT TGTT CTT AGTTTCGTG
                     C C_ _
GAM3746 gm117 3' GACAAAACTCTCAAAGCA 84792 A
                                          GAA
                    GA CAAAAC CTCAAAGCA
                    CT GTTTTG GAGTTTCGT
GAM3746 KIAA0982 3' GAAAAGAACATATACAAAGCAC 84793
                                           CAA AACT
                    GAA AACG CAAAGCAC
```

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CTT TTGT GTTTCGTG
                      TTC ATAT
           3' ACAAATAAGACATTTACAAAGC 84794 C A AACT
GAM3746 LHX6
         AC
                      ACGAA AA ACG CAAAGCAC
                     TGTTT TT TGT GTTTCGTG
                       A C AAAT
GAM3746 MGC15437 3' ACAAACAAAACGACAGCA 84795
                                              A TCAA
                     ACGAACAAACGA C AGCA
                     TGTTTGTTTTGCT G TCGT
GAM3746 VRP
            5' CGAACAGGGTCTCAAAGCAC 84796
                                           AAACGAA
                     CGAACA
                            CTCAAAGCAC
                     GCTTGT
                             GAGTTTCGTG
                       CCCA
GAM3746 LOC120856 3' ACGAACAAAACAGAACTTCAA 84797
                     ACGAACAAAC GAACT CAA
                     TGCTTGTTTTG CTTGA GTT
                         T A
GAM3746 LOC122700 3' GAACAAAACATCATTTTCAAAG 84798
                                               AAC
                     GAACAAAACG TCAAAG
                     CTTGTTTTGT
                                 AGTTTC
                         AGTAAA
GAM3746 LOC134218 3' AACAAAACACAAAAGCA 84799
                                            AACTC
                     AACAAACG AAAGCA
                     TTGTTTTGT TTTCGT
                        GT
GAM3746 LOC136263 3' AAACAAAATACATACACTCAAG 84800
                                              CGA___
        GCAC
                       GAACAAAA ACTCAA GCAC
                     TTTGTTTT
                             TGAGTT CGTG
                        ATGTATG C
GAM3746 LOC136319 3' GAAAAAATGAACTCAAA 84801 C C
                     GAA AAAA GAACTCAAA
                     111 1111 11111111
                     CTT TTTT CTTGAGTTT
                       Α
GAM3746 LOC145566 5' GAACGAGGAGGGCTCAAAGCA 84802
                                              AAAAC A
                     GAAC GA CTCAAAGCA
```

GAM3746 LOC161527 5' GAACAAAACATCTCTAGAGCAC 84803

CTCCT CC

CTTG CT GAGTTTCGT

GAACAAACG CTC AGCAC

AA AA

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CTTGTTTTGT GAG TCGTG
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A_ ATC GAM3746 LOC201848 3' GAACAAACTGATAGGGTTTAAA 84804 AC ACTC **GCAC** GAACAAA GA AAAGCAC CTTGTTT CT TTTCGTG GA ATCCCAAA GAM3746 LOC220558 3' GAACAAAAACGGAAAAAAAAGC 84782 _ AACTC_ GAACAAAA CG AAAGCA CTTGTTTT GC TTTCGT T CTTTTT GAM3747 GALC 3' ACTTTAAAAAGTAAGTACA 84807 CACCTC GCTTT AAGTAAGTACA TGAAA TTCATTCATGT TTT GAM3747 HPGD 3' TAGCTTTCCTCTTTTAAAGTA 84808 AC CAAGT TAGCTTTC CT AAGTA ATCGAAAG GA TTCAT GA AAAT CC GAM3747 LARS 3' TAGCCTTCATCAAAGTA 84809 TAGCTTTCA TCAA GTA ATCGGAAGT AGTT CAT GAM3747 NCALD 3' TAGCTTTCAATTCAAATTAGT 84810 CC TAGCTTTCA TCAAGT AGT ATCGAAAGT AGTTTA TCA TA A GAM3747 NRAS 3' TAGCTTTCCTTCAATGGTA 84811 ACC GTAA TAGCTTTC TCAA GTA ATCGAAAG AGTT CAT GA_ AC__ GAM3747 PTGS2 3' GCTTTTCACTTAAAATAAGT 84812 _ CTC GCTTT CAC AAGTAAGT CGAAA GTG TTTATTCA A AAT GAM3747 SH2D1A 3' GCTTTTACCTCAAGAAAT 84813 С Т GCTTT ACCTCAAG AAGT CGAAA TGGAGTTC TTTA Α GAM3747 SLC9A6 3' GCCTTTCGGAGAGTAAGTACA 84814 CACCTCA

GCTTT AGTAAGTACA

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CGGAA TCATTCATGT
                      AGCCTC_
GAM3747 XCL1 3' TAGCTTTCACCTCTGATAGACA 84815
                                            AA AT
                    TAGCTTTCACCTC GTA G ACA
                    ATCGAAAGTGGAG TAT C TGT
                         AC __
GAM3747 BPESC1 3' GCTTTCACCACAGAGAGCA 84816
                                            TCA TA
                    GCTTTCACC AG AGTA
                    CGAAAGTGG TC TCGT
                        TG TC
GAM3747 CENTG1 3' TAGCTTCCACCCATGGGTAGGT 84817
                                               CAA A
                    TAGCTTTCACCT GTA GT
                    ATCGAAGGTGGG CAT CA
                         TACC C
GAM3747 KIAA0436 3' TAACTTTCACCTTAGGCA 84818
                                            CAA
                    TAGCTTTCACCT GTA
                    ATTGAAAGTGGA CGT
                         ATC
GAM3747 KIAA1679 3' TAGCTTTCATCTAGTCCAGCA 84819
                                             CC A A
                    TAGCTTTCA TC AGT AGTA
                    ATCGAAAGT AG TCA TCGT
                        __ A GG
GAM3747 MRPS27 3' TAGCTTTCTCCTCAGAAACTTA 84820
                                           A AGTAAG
        CA
                     TAGCTTTC CCTCA TACA
                    ATCGAAAG GGAGT ATGT
                       A CTTTGA
GAM3747 NIR3 3' TAGCTTTCACTCTGTA 84821
                                        C AA
                    TAGCTTTCAC TC GTA
                    ATCGAAAGTG AG CAT
                        _ A_
GAM3747 SH3BGRL2 3' TAGCTTTGTCTAGCAAGTA 84822
                                            CACC A
                    TAGCTTT TC AGTAAGTA
                    ATCGAAA AG TCGTTCAT
                       C___ A
GAM3747 LOC199796 5' GCTTCACCTTGGTAAAC 84823
                                        T CAA GT
                    GCTT CACCT GTAA AC
                    CGAA GTGGA CATT TG
                      _ AC_ _
GAM3747 LOC90529 3' TAGCTTTCGCCCAGTAGAC 84824
                                            A CA AT
```

TAGCTTTC CCT AGTA G AC

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ATCGAAAG GGG TCAT C TG
                        C __ __
GAM3748 USH2A 5' ACAGGACCGCTGTCCCTCGT 84827
                                         A G GC
                     ATAG ACCGCTGTC CC CGT
                     TGTC TGGCGACAG GG GCA
                      C
                           _ A_
GAM3748 C22orf2 3' TAGAACTGCTGTCACACG 84828
                                          С
                     TAGAAC GCTGTCGC CG
                     ATCTTG CGACAGTG GC
                       Α
                           Т
GAM3748 DAMS
             3' GAATCCGTGCCGCCGTC 84829
                                         CCG C
                     GAA CTGT GCCGCCGTC
                     CTT GGCA CGGCGGCAG
GAM3748 DOC-1R 5' GCTGTCGCAGCTGCCGTCG 84830
                                            C__
                     GCTGTCGC GCCGTCG
                     CGACAGCG CGGCAGC
                        TCGA
GAM3748 HUMAGCGB 5' ATAGGGGCGCCCACCGTCGTCG 84831
                                               AAC GT C
                     ATAG CGCT CGCCG CGTCG
                     TATC GCGG GTGGC GCAGC
                      CCC A
GAM3748 KIAA1102 5' GAGGACGCCGCCGCCGTCG 84832
                                           ACC T
                     GA GC GTCGCCGCCGTCG
                     CT TG CGGCGGCGGCAGC
                     CC_ C
                                          AC C C
GAM3748 RALY 5' GAGTCGTCGTCGCCGTCG 84833
                     GA CG TGTCG CGCCGTCG
                     CT GC GCAGC GCGGCAGC
                     CA A A
GAM3749 CYLD
             3' TCCTGTATATTTTAATTAAATA 84836
                                           GC
                     TCTTGTAT ATTTTAATTAAATA
                     AGGACATA TAAAATTAATTTAT
GAM3749 FLJ20689 3' TCTTGTGGCATTTTAAAAAAT 84837
                                           AΤ
                                                 TT
                     TCTTGT GCATTTTAA AAAT
                     AGAACA CGTAAAATT TTTA
                       \mathsf{C}_{-}
                            T_
                                           A_ ATTT
GAM3749 FLJ22670 3' TCTTGTGCTGCCAATTAAAT 84838
                     TCTTGT TGC TAATTAAAT
```

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AGAACA ACG GTTAATTTA
                       CG
GAM3749 LOC202860 3' TCTTGGTGCATTTTAATCA 84839
                                           TΑ
                    TCTTG TGCATTTTAATTA
                    AGAAC ACGTAAAATTAGT
                       С
GAM3749 LOC90719 3' TCTTGTATTGCATTTTTTCAA 84840
                                                AA
                    TCTTGTAT GCATTTT TTAA
                     AGAACATA CGTAAAA AGTT
                        Α
                           AA
GAM3749 LOC92293 3' TCTTGTTGCATTTTTTAACAAA 84841
                                                AAT
                                           Α
                      TCTTGT TGCATTTT TAAATA
        TA
                     AGAACA ACGTAAAA GTTTAT
                           AATT
GAM3750 PDYN 3' TTTATGATGTGTATACTA 84844
                                          AACA
                    TTTATGATGT TATATTA
                    AAATACTACA ATATGAT
                        C___
GAM3751 BAT5
            3' TGAACACAGAGAATCACAAATA 84847
                                              CCA
                     TGA CACAGAGA ACAAATAA
                     ACT GTGTCTCT TGTTTATT
                      Т
                          TAG
GAM3751 CANX
             3' TGACCACAGAACAACA 84848
                                          AC
                    TGACCACAGAG CAACA
                     ACTGGTGTCTT GTTGT
GAM3751 CTGF 3' TGGTCACACTCTCAACAAATAA 84849 AC GAGAC
        Α
                     TG CACA CAACAAATAAA
                     AC GTGT GTTGTTTATTT
                     CA GAGA
GAM3751 FUT3
            3' TGGCCACAAAGGACTCCAGCA 84850 A
                    TG CCACAGAG CCA CA
                     AC GGTGTTTC GGT GT
                         CTGA C
GAM3751 HOXD4 3' ACCACATTTCCCAACAAATAAA 84851
                                            GAGA
                    ACCACA CCAACAAATAAA
                     TGGTGT GGTTGTTTATTT
                       AAAG
GAM3751 MBL2
            3' TGACACAAGCATCAACAAATA 84852
                                          C G AC_
                    TGAC ACA AG CAACAAATA
```

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ACTG TGT TC GTTGTTTAT
                       _ _ GTA
GAM3751 MYBL1 3' ACCACAAAAGCAAATAA
                                           ACCAA
                                  84853
                     ACCACAGAG CAAATAA
                     TGGTGTTTT GTTTATT
                         С
GAM3751 PPP4R1 3' TGGCCACAGAGCCCAGCAA 84854 A
                                             АА
                     TG CCACAGAG CCA CAA
                     11 11111111 111 111
                     AC GGTGTCTC GGT GTT
                      С
                          G C
GAM3751 SCN3A 5' TGACCACAGAGGTTTACAAA 84855
                                              ACCA
                     TGACCACAGAG ACAAA
                     ACTGGTGTCTC TGTTT
                         CAAA
GAM3751 FLJ13449 3' CACAAAGACTCCCAAATAAA 84856
                                             CAA
                     CACAGAGAC CAAATAAA
                     GTGTTTCTG GTTTATTT
                        AGG
GAM3751 FLJ20533 3' TGAGCACGAACACTAACAAATA 84857
                                            CAGGC
                     TGA CAC A AC AACAAATA
                     ACT GTG T TG TTGTTTAT
                      C CTGA
GAM3751 FLJ22833 3' ACTATAGACCACAAATAA 84858 AG A
                     AC AGACCA CAAATAA
                     TG TCTGGT GTTTATT
                      ATA
GAM3751 HRH4 3' TGCCCGGCCAACAATAA 84859 A ACAGAGA
                     TG CC CCAACAATAA
                     AC GG GGTTGTTTATT
                      _ GCC
GAM3751 ITPK1 3' TGGCCATGGAGACCAACAGACA 84860 A CA
                     TG CCA GAGACCAACA ATA
                     AC GGT CTCTGGTTGT TGT
                      C AC
GAM3751 MIC2L1 3' TGACCACAGAGCTACAAA 84861
                                             ACCA
                     TGACCACAGAG ACAAA
                     ACTGGTGTCTC TGTTT
                         \mathsf{GA}_{-}
GAM3751 LOC145508 3' TGGCCACAAAAAGACAAATAAA 84862 A
                                                 CCA
                     TG CCACAGAGA ACAAATAAA
```

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AC GGTGTTTTT TGTTTATTT
                     С
                          C__
GAM3751 LOC158046 3' TGATCATTAGATCCCACAAATA 84863 C C GA A
                     TGA CA AGA CCA CAAATAA
                    ACT GT TCT GGT GTTTATT
                      A AA AG
GAM3751 LOC169026 3' ACCACAGAGCCCTAGATAAA 84864
                                             A AACAA
                    ACCACAGAG CC ATAAA
                    TGGTGTCTC GG TATTT
                        GATC
GAM3752 CLASP1 5' TGGCACTCCCAGAGCTTTGCC 84867
                                               TATACCTC
                    TGG ACTCCCGGA
                                    GCC
                    ACC TGAGGGTCT
                                    CGG
                     G
                          CGAAA
            3' TGGAATTCTCAGAGGGAACCT 84868
GAM3752 LEP
                                         C C TAT
                    TGGAA TC CGGA ACCT
                    ACCTT AG GTCT TGGA
                      A A CCCT
GAM3752 KCNN1 5' GGGCCGCCGGATATGTCTTGC 84869 AA C
                                                 AC C
                    GG CT CCGGATAT CT GC
                    CC GG GGCCTATA GA CG
                     C C CA A
GAM3752 KIAA0172 5' TGGAAGTCCATATACCTTGC 84870
                                           C CGG
                                                   C
                    TGGAA TCC ATATACCT GC
                    ACCTT AGG TATATGGA CG
                      С
                              Α
GAM3752 LOC221271 3' TGGAACTCATACCTG
                                          CCGGAT
                                  84871
                    TGGAACTC ATACCT G
                    ACCTTGAG
                              TATGGA C
GAM3752 LOC92379 3' TGGAATTCCACTTTACCTCGCC 84872
                                            C CGGATA
                    TGGAA TCC
                               TACCTCGCC
                    ACCTT AGG ATGGAGCGG
                      A TGAA
GAM3753 ADAR
             3' TAAGTCATGATTATCTGA 84875
                                          CAATT GA
                    TAAGTCATGA TTA TGA
                    ATTCAGTACT AAT ACT
                            _ AG
GAM3753 ADAR
             3' TAAGTCATGATTATCTGA 84875
                                          CAATT GA
                    TAAGTCATGA TTA TGA
```

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ATTCAGTACT AAT ACT
                         ____ AG
GAM3753 ADAR 3' TAAGTCATGATTATCTGA 84875
                                         CAATT GA
                    TAAGTCATGA TTA TGA
                     ATTCAGTACT AAT ACT
                          ____ AG
GAM3753 UCP3 3' AGTCATAATAATTTCCCGA 84876
                                          C A_
                    AGTCATGA AATTTT GA
                     TCAGTATT TTAAAG CT
                        A GG
GAM3753 FLJ21934 3' GCCATGACATCTAGATGAG 84877
                                            ΑT
                     GTCATGACA TTTAGATGAG
                     CGGTACTGT AGATCTACTC
GAM3753 LOC220115 5' CAAGTTGTCTTTTTAGATGAG 84878
                                            CA ACAA
                    TAAGT TG TTTTAGATGAG
                     GTTCA AC AAAATCTACTC
                      __ AGA_
GAM3753 LOC257117 5' TAAGTCATGAAATATG
                                           C TTTAG
                                  84879
                    TAAGTCATGA AAT ATG
                     ATTCAGTACT TTA TAC
GAM3753 LOC93538 3' TAAGTCATTGCAATTTTAA 84880
                                           GA
                    TAAGTCAT CAATTTTAG
                    ATTCAGTA GTTAAAATT
                        AC
GAM3754 C18orf1 3' CATTTTCTCATAAACTATGCA 84883 CG
                                               AACAG
                    CA TTCTCATAAA GCA
                    GT AAGAGTATTT CGT
                     AA
                           GATA
GAM3754 KIF3B 3' GTTCTTATTCAAACAGGCA 84884
                                         C AA
                     GTTCT AT AAACAGGCA
                     CAAGA TA TTTGTCCGT
                       A AG
GAM3754 NRG1
             3' GTTCTCATGCGACAGGCA 84885
                                           AAAA
                     GTTCTCAT ACAGGCA
                     CAAGAGTA TGTCCGT
                        CGC_{-}
GAM3754 NRG1
             3' GTTCTCATGCGACAGGCA 84885
                                           AAAA
                    GTTCTCAT ACAGGCA
```

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CAAGAGTA TGTCCGT
                       CGC
GAM3754 PODXL 3' TCCTGTTTTCCCCCAAACAGGC 84886 ACG ATAA
        Α
                    TCC TTCTC AAACAGGCA
                    AGG AAGGG TTTGTCCGT
                     ACAA GG
GAM3754 SEPN1 3' TCCACTTTGGGGAAAACAGGCA 84887
                                         GTTCTCATA
                    TCCAC
                           AAAACAGGCA
                    AGGTG TTTTGTCCGT
                      AAACCCC
GAM3754 DKFZP434J037 3' CCCATGTACACAAGAAACAGGC 84888 C TCT _
        Α
                    TCCA GT CATAA AAACAGGCA
                    GGGT CA GTGTT TTTGTCCGT
                     AT C
GAM3754 ERO1L 3' TCCATTGTCCAGAAACAGGCA 84889 C TCATAA
                    TCCA GTTC AAACAGGCA
                    AGGT CAGG TTTGTCCGT
                     AA TC
GAM3754 FLJ13912 3' TCCATCTTAAAACAGG 84890
                                       CGT CATA
                    TCCA TCT AAAACAGG
                    AGGT AGA TTTTGTCC
                      ___ A_
GAM3754 FLJ20055 5' TCCATGTTTAAAACAGG 84891 C CTCATA
                    TCCA GTT AAAACAGG
                    AGGT CAA TTTTGTCC
                     A A_
GAM3754 FLJ22215 3' CGTCACTATAGAAACAGGC 84892 C A
                    CGTT CT ATA AAACAGGC
                    GCAG GA TAT TTTGTCCG
                     T _ C
GAM3754 IL18BP 5' GTTTCCATATGAACAGGCA 84893
                                        CT AA
                    GTT CATA AACAGGCA
                    111 1111 1111111
                    CAA GTAT TTGTCCGT
                     AG AC
GAM3754 KIAA1209 3' GTATCGATTAGAAACAGGCA 84894 _ TCA A
                    GT TC TA AAACAGGCA
```

CA AG AT TTTGTCCGT

TCCACGTT CAT AGGC

CT__ AAAAAC

T CTA C

GAM3754 LHFP 3' TCCACGTTTGTGCATAGGC 84895

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AGGTGCAA GTA TCCG
                       ACAC _
GAM3754 TIGD1 5' TCCACGTCTTATAAAAGAC 84896 T C AAC
                    TCCACGT CT ATAAA AGGC
                    AGGTGCA GA TATTT TCTG
                      _ A
GAM3754 LOC196812 3' GTTTTCATAAAAATGGCA 84897
                                            CA
                    GTT TCATAAAAA GGCA
                    CAA AGTATTTT CCGT
GAM3754 LOC221312 3' TCTGGCAAGAAACAGGCA 84898
                                         __ TA
                    TCT CA AAAACAGGCA
                    AGA GT TTTTGTCCGT
                     CC TC
GAM3754 LOC63923 3' CAAGACCCTCATAAAGACGGGC 84899 C TT
        Α
                    CA G CTCATAAA AC GGCA
                    GT T GAGTATTT TG CCGT
                    TC GG C C
GAM3755 CASP7 3' TGATGGATACATATC 84902 C GTGTCC
                    TG ATGGA TACATATC
                    AC TACCT ATGTATAG
GAM3755 CASP7 3' TGATGGATACATATC 84902 C GTGTCC
                    TG ATGGA TACATATC
                    AC TACCT ATGTATAG
GAM3755 CASP7 3' TGATGGATACATATC 84902 C GTGTCC
                    TG ATGGA TACATATC
                    AC TACCT ATGTATAG
GAM3755 CYR61 3' CATGGAGTGTCCCCCTTCA 84903
                                        ACATA
                    CATGGAGTGTCCT TCA
                    GTACCTCACAGGG AGT
                         GGA
GAM3755 GAS7 3' TAGAGTGCCTATGTATCAA 84904
                                        T CA
                    TGGAGTG CCTA TATCAA
                    ATCTCAC GGAT ATAGTT
                      _ AC
            3' TGTATGTGAGTGTTTTACA 84905 C _ CC
GAM3755 HPGD
                    TG ATG GAGTGT TACA
```

```
AC TAC CTCACA ATGT
                      A A AA
GAM3755 ITPR2 3' TGCATGCAGACATATC
                               84906 G TGTCCT
                     TGCATG AG
                              ACATATC
                     ACGTAC TC
                               TGTATAG
                       G
GAM3755 ARAP3 3' CATGGAACCCCTACGTATCAA 84907
                                            GTG A
                     CATGGA TCCTAC TATCAA
                     GTACCT GGGATG ATAGTT
                       TG
GAM3755 DCOHM 3' GAGTGGCAACTACATATCAA 84908
                                            TC
                     GAGTG CTACATATCAA
                     CTCAC GATGTATAGTT
                       CGTT
GAM3755 FLJ13110 3' TGCAGTTTTCTTACATATCA 84909 G G C
                     TG AGT TC TACATATCA
                     AC TCA AG ATGTATAGT
                      G AA A
GAM3755 FLJ21934 3' TGTGTAGAGCTTTACATATCAA 84910 CA GTCC
                     TG TGGAGT TACATATCAA
                     AC ATCTCG ATGTATAGTT
                      AC
                          AA
GAM3755 KIAA1826 3' CAAGAATTGTTCTACATAT 84911 T G C
                     CA GGA TGT CTACATAT
                     11 111 111 11111111
                     GT CTT ACA GATGTATA
                      TAA
             3' TGCATGCAGACATATC
                                         G TGTCCT
GAM3755 NPFF
                                 84906
                     TGCATG AG ACATATC
                     ACGTAC TC
                               TGTATAG
                       G
GAM3755 PGR1
             3' TGCATGGAGTCGTCTTCCA 84912
                                            _ CTA
                     TGCATGGAGT GTC CA
                     ACGTACCTCA CAG GT
                         G AAG
GAM3755 RNAH
             3' TGCTTTTTCATCTTACATATCA 84913
                                          ATGGAG C
                     TGC TGTC TACATATCAA
         Α
                        ACG GTAG ATGTATAGTT
                      AAAAA_A A
GAM3755 LOC155438 3' TGCAGGAGTGTCTTCACCA 84914
                                            Т
                                                CTACA
                     TGCA GGAGTGTC TATCA
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ACGT CCTCACAG GTGGT
                         AA
GAM3755 LOC197287 3' TGCAAGGACCTGCATATCA 84915 T GTGT A
                    TGCA GGA CCT CATATCA
                    ACGT CCT GGA GTATAGT
                      T C
GAM3755 LOC221981 3' GCAGAATGTCTTATATGTCAA 84916
                                          TG CCA
                    GCA GAGTGTC TA AT TCAA
                    CGT CTTACAG AT TA AGTT
                         AAC
GAM3756 FGF6
            3' TCAATCGAACAGATGATGCTTT 84919
                                            CGCAAC
        Α
                     TCGATCGGAT
                                 GCTTTA
                    AGTTAGCTTG
                                CGAAAT
                        TCTACTA
GAM3757 GABARAPL3 5' AGGGGGACCTCGGGTGCG 84922
                                          TGT A A
                    AGG GA TCTCG GTGCG
                    TCC CT GGAGC CACGC
                     CC_ _ C
GAM3757 PEG10 3' TAGGAGTGTGAATCTGGGTG 84923
                                               CGA
                                         AA
                    TAG GGTGTGAATCT GTG
                    ATC TCACACTTAGA CAC
                           CC
GAM3758 CASP10 3' TGCAGGGCTGTGAAGTGAGAC 84926
                                           AGACG
                    TGCA TGTGAAGT AG C
                    ACGT ACACTTCA TC G
                      CCCG
                             СТ
            3' AAGACCCTAGAAAGTAGCGA 84927
GAM3758 FEZ1
                                         GTGT
                    AAGAC GAAGTAGCGA
                    TTCTG TTTCATCGCT
                      GGATC
            3' TGCAAGGCATGTGAAATGCAGC 84928
GAM3758 FPGS
                    TGCAAG CGTGTGAA GTAGC
                    ACGTTC GTACACTT CGTCG
                      С
                          TΑ
GAM3758 PABPN1 3' AGACGTGTCCATGGCGAA 84929
                                           GAA A
                    AGACGTGT GT GCGAA
                    TCTGCACA TA CGCTT
                       GG_C
GAM3758 PITPNB 3' TGCAGGACATGTGGGAAAAC 84930
                                              AAGT
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TGCA GACGTGTG AGC

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С
                           CCTT
GAM3758 DKFZp761N1114 3' TGTCAGGCGTGTGAATCACAGC 84931 CA A
                                                        G
                     TG AG CGTGTGAA TAGC
                     AC TC GCACACTT GTCG
                      AG C
                             AGT
GAM3758 KIAA1128 3' TGCAAGACGTGTGTAAAGC 84932
                                               AAGT
                     TGCAAGACGTGTG AGC
                     ACGTTCTGCACAC TCG
                          ATT
GAM3758 MGC14839 3' AAGGTGTGTGAAAAAGGA 84933
                                            AC
                                                 T C
                     AAG GTGTGAAG AG GA
                     TTC CACACTTT TC CT
                      CA
                           Т
                                              AC TG
GAM3758 MGC26651 3' TGCAAAGTATACAAAGTAGTGA 84934
                                                      C
         Α
                      TGCAAG GTG AAGTAG GAA
                     ACGTTT TAT TTCATC CTT
                        CA GT A
GAM3758 LOC112609 3' GCAAGACAGGTGGTGAAC 84935
                                              T AA
                     GCAAGACG GTG GT AGC
                     11111111 111 11 111
                     CGTTCTGT CAC CA TTG
                        C C
                                               A _ T AA
GAM3758 LOC145547 5' TGCAGGATCGGTGGGTAGCGAA 84936
         С
                      TGCA GA CG GTG GTAGCGAAC
                     ACGT CT GC CAC CATCGCTTG
                       C A _ C_
GAM3758 LOC149478 3' TGTGAGACGTGTCAGACAGGA 84937
                                                  GA C
                                             CA
                     TG AGACGTGT AG TAG GA
                     AC TCTGCACA TC GTC CT
                      AC
                           G_ T _
GAM3758 LOC91796 3' TGTAAAACGTGTGTTTGAAC 84938 C
                                                AAGT
                     TG AAGACGTGTG AGC
                     AC TTTTGCACAC TTG
                           AAAC
GAM3759 SNAP23 3' TATATGAATCACTAAGAG 84941
                                             AGTTGC
                     TATATGAATTAT
                                   AAGAG
                     ATATACTTAGTG
                                   TTCTC
GAM3759 SNAP23 3' TATATGAATCACTAAGAG 84941
                                             AGTTGC
                     TATATGAATTAT
                                   AAGAG
```

ACGT CTGTACAC TTG

```
ATATACTTAGTG TTCTC
                        Α
GAM3759 DNAM-1 3' TATGAATTGCCAAGAG
                                       ATTATA _
                                84942
                    TATGA GTTGC AAGAG
                        11111
                          TAACG TTCTC
                    ATACT
                            G
GAM3760 ACHE 3' TGGGGTGGGGATGGGCA
                                 84945
                                         AGAC C
                    TGGGGTGG GG GTGGGCG
                    ACCCCACC CC TACCCGT
GAM3760 ACHE
            3' TGGGGTGGGGATGGGCA 84945
                                         AGAC C
                    TGGGGTGG GG GTGGGCG
                    ACCCCACC CC TACCCGT
GAM3760 CRAT 5' TGGGGCGGGGGGGGCA 84946
                                          AGAC T
                    TGGGGTGG GGCG GGGCG
                    ACCCCGCC CCGC CCCGT
                       C_____
                                 84947
GAM3760 FASN
            3' TGGGGTGGGGTGGGGA
                                         AGACG C C
                    TGGGGTGG G GTGGG GA
                    ACCCCACC C CACCC CT
GAM3760 FASN 3' TGGGGTGGGGATGGTGGA 84948
                                         A C CG
                    TGGGGTGG GA GG TGGG
                    ACCCCACC CT CC ACCT
                       CA_{-}
                                          G C GT
GAM3760 GFRA2 5' TGGGGTGAGAGGCGGGCGA 84949
                    TGGGGTG AGA GGC GGGCGA
                    ACCCCAC TCT CCG CCCGCT
GAM3760 GRP58 5' TGGGGTGGGGACGGCCGGA 84950
                                           A G
                    TGGGGTGG GACGGC TGGG
                    ACCCCACC CTGCCG GCCT
                       С
GAM3760 MEOX1 3' TGGGGTGGGGAGGTGGG 84951
                                          A CG C
```

TGGGGTGG GA G GTGGG

ACCCCACC CT C CACCC

TGGGGTGG GA G GTGGG

84951

A CG C

11111111 11 1 11111

GAM3760 MEOX1 3' TGGGGTGGGGAGGTGGG

C ____

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ACCCCACC CT C CACCC
                   C ____
GAM3760 NCOR2 3' TGGCGTGGAGGTGCGTGG 84952 G ACG
                TGG GTGGAG GCGTGG
                ACC CACCTC CGCACC
                 G
                    CA
GAM3760 PAX2
          3' TGGGGTGAGGCTGGGGCG 84953
                                  AGAC GT
                TGGGGTGG GGC GGGCG
                ACCCCACT CCG CCCGC
                   AC
GAM3760 PAX2
          3' TGGGGTGAGGCTGGGGCG 84953
                                   AGAC GT
                TGGGGTGG GGC GGGCG
                ACCCCACT CCG CCCGC
                   ___ AC
GAM3760 PDE4A 5' GGGTGGAGGCGGTGGG
                           84954
                                  A CG
                GGGTGGAG CGG TGGG
                CCCACCTC GCC ACCC
                   C __
GAM3760 PSD
         5' TGGGGTGGGGCTGGCG 84955
                                 AGAC GTG
                TGGGGTGG GGC GGCG
                ACCCCACC CCG CCGC
                   ____ A__
AGA C
                TGGGGTGG CGG GTGGGCG
                ACCCCACC GCC CACCCGC
                   CCC
AGA C
                TGGGGTGG CGG GTGGGCG
                ACCCCACC GCC CACCCGC
                   CCC _
AGA C
                TGGGGTGG CGG GTGGGCG
                ACCCCACC GCC CACCCGC
                   CCC _
GAM3760 SPTBN4 3' TGGGGTGGGGGTGGTGA 84957
                                   AGAC C GC
                TGGGGTGG GG GTGG GA
                ACCCCACC CC CACC CT
GAM3760 TNFSF12 3' TGAGGTGGAGAGTGGGCG 84958
                                    CGGC
                TGGGGTGGAGA GTGGGCG
```

ACTCCACCTCT CACCCGC

GAM3760 TTC3 3' TGGGGTGGGGAAGGAGAATGG 84959 ACCTGGGGTGG GA GG GTGG ACCCCACC CT CC TACC C T TCT GAM3760 XYLB 3' TGGGGTGGGGGCGGCTATGGG 84960 AGA TGGGGTGG CGGC GTGGG ACCCCACC GCCG TACCC CCC A GAM3760 YWHAE 3' TGGGGAGGGGGGGGGG 84961 T AC C TGGGG GGAG GG GTGG ACCCC CCTC CC CACC T C GAM3760 ZYX 3' TGAGGTGGGGGCAGGTGG 84962 AGA C TGGGGTGG CGG GTGG ACTCCACC GTC CACC CCC _ GAM3760 ARHF 3' TGGGGTGGAGATGGGAGGG 84963 C CGT TGGGGTGGAGA GG GGG ACCCCACCTCT CC CCC A CT CG __ GAM3760 C11orf16 3' TGGGGTGGAGATACTGGTGG 84964 TGGGGTGGAGA GC GTGG ACCCCACCTCT TG CACC A_ AC GAM3760 CARM1 3' TAGGGTGGGGACGGCGAAC 84965 **GTG** TGGGGTGG GACGGC GGCGAT ATCCCACC CTGCCG CCGTTG C GAM3760 DKFZP434J1813 5' TGGGGTGGAGAGGGCGG СС 84966 TGGGGTGGAGA GG GTGG ACCCCACCTCT CC CGCC GAM3760 DKFZp547O146 5' TGGGGTGGGGAGAGGGGCG 84967 A C CGT TGGGGTGG GA GG GGGCG ACCCCACC CT TC CCCGC $\mathsf{C} \; \mathsf{C} \; {}_{-}$ GAM3760 FAM3A 3' TGGGGATGGAGATGGCGTGAGG 84968 C TGGGG TGGAGA GGCGTGGG GA Α

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ACCCC ACCTCT CCGCACTC CT
                        Α
GAM3760 FLJ10305 3' TGGGGTGGGGTGGG
                                        AGAC C
                                 84969
                    TGGGGTGG GG GTGGG
                    ACCCCACC CC CACCC
GAM3760 FLJ14810 3' GGGGTGGGGACGGCGAGAAGGC 84970 A T_
        GAT
                     GGGGTGG GACGGCG GGGCGAT
                    CCCCACC CTGCCGC TCCGCTA
                       С
                          TCT
GAM3760 FLJ14950 3' TGGGGTGGGGTGGGTGTGGG 51873
                                             AGAC C
                    TGGGGTGG GG GTGGG
                    ACCCCACC CC CACCC
                       CCCAC A
GAM3760 FLJ25193 5' TGGGGTGGAGGGCA
                                 84971
                                          ACGGCGT
                    TGGGGTGGAG
                                 GGGCG
                    ACCCCACCTC
                                CCCGT
                                             A C ____
GAM3760 FRAG1 3' TGGGGTGGGGAAGGCCAGAATG 84972
        G
                     TGGGGTGG GA GGC GTGG
                    ACCCCACC CT CCG TACC
                       C T GTCT
GAM3760 JM4
            3' TGGCGTGGGGGTAGGGCG 84973
                                       G AGAC C
                    TGG GTGG GG GT GGGCG
                    ACC CACC CC CA CCCGC
                        _ _ T
                     G
GAM3760 KIAA0084 5' GGGTGGAGGCGTGGGCG
                                          GAC
                                  84974
                    GGGTGGA GGCGTGGGCG
                    CCCACCT CCGCACCCGC
GAM3760 KIAA0461 3' TGGGGTGGGAGAAATGGGTGG 84975
                                             _ C__ C
                    TGGGGTGG AGA GG GTGG
                    ACCCCACC TCT CC CACC
                       C TTA _
GAM3760 KIAA1111 3' TGGGGTGAGGTTGGAGTGGG 84976
                                            AGAC C
                    TGGGGTGG GG GTGGG
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3' TGGGGGGAGCTGGGCG

GAM3760 LGP1

ACCCCACT CC CACCC

TGGGG GGA GC TGGGCG

84977 T GACG G

CCAA T

ACCCC CCT CG ACCCGC

AGAC __ GAM3760 MAPKAPK3 3' TGGGGTGGGGCTGGTAAGC 84978 TGGGGTGG GGC GTGGGC ACCCCACC CCG CATTCG ___ AC GAM3760 MESDC1 3' TGGGGTAGGGGGTGGGAGTGAT 84979 AGAC C C TGGGGTGG GG GTGGG GAT ACCCCATC CC CACCC CTA C TCA GAM3760 MGC3184 5' TGGGGCGGAGGCGGCTCTGA 84980 A G TGGGGTGGAG CGGC TGG ACCCCGCCTC GCCG ACT C AG GAM3760 NPTXR 3' TGGGGTGGGGATGCCAAGA 84981 A CG GT TGGGGTGG GA GC GGG ACCCCACC CT CG TCT C A_ GT GAM3760 NPTXR 3' TGGGGTGGGGATGCCAAGA 84981 A CG GT TGGGGTGG GA GC GGG ACCCCACC CT CG TCT C A GT GAM3760 POLR2D 3' TGGGGTGGAGGTGTTCG 84982 ACGGC GG TGGGGTGGAG GTG CG ACCCCACCTC CAC GC AA AC G GAM3760 PPP1R16B 3' TGGGGTGGAGGTGGCCTGA 84983 TGGGGTGGAG GGC TGG ACCCCACCTC CCG ACT CA G GAM3760 SEMA4G 3' TGGGGTGGAGGTGGGAGA 84984 ACGGC C TGGGGTGGAG GTGGG GA ACCCCACCTC CACCC CT Τ GAM3760 SEMA4G 3' TGGGGTGGAGGTGGGAGA 84984 ACGGC C TGGGGTGGAG GTGGG GA ACCCCACCTC CACCC CT Т GAM3760 LOC126353 3' TAGGGTGGGGGCTTGGCGA 84985 AGAC GTG TGGGGTGG GGC GGCGA

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ATCCCACC CCG CCGCT
                       C___ AA_
GAM3760 LOC126964 3' GGGGTGGAGGCGCACACA 84986 GAC G
                    GGGGTGGA GGCGTG GCG
                    CCCCACCT CCGCGT TGT
                           G
GAM3760 LOC132422 5' TGGGGTGGGGGGGGGGG 84987 AGA T
                    TGGGGTGG CGGCG GG
                    ACCCCACC GCCGC CC
                       CCC
GAM3760 LOC145693 5' TGGGGTGGAGGTGGGCGTGGG 84988
                                              AC
                    TGGGGTGGAG GGCGTGGG
                    ACCCCACCTC CCGCACCC
                        CAC
GAM3760 LOC147004 3' TGGGGTGGGGGGGGTGCG 84989
                                            AGAC CGT
                    TGGGGTGG GG GG GCG
                    ACCCCACC CC CC CGC
                       ____ CC_ A
                                           G AC _
GAM3760 LOC147111 3' TGGGGTGAGGTGGCACTGG 84990
                    TGGGGTG AG GGCG TGG
                    ACCCCAC TC CCGT ACC
                      CA G
GAM3760 LOC149506 3' TGGGCTGGGGATGGTGA 84991
                                         G AGAC C GC
                    TGGG TGG GG GTGG GA
                    ACCC ACC CC TACC CT
GAM3760 LOC150498 3' TGGGGAGGAGGGGGTGG 84961 T AC C
                    TGGGG GGAG GG GTGG
                    ACCCC CCTC CC CACC
                      T C_ _
GAM3760 LOC151056 3' TGGGGTGGGGGGGGGGGGG 84992
                                         AGAC CGT
                    TGGGGTGG GG GGGCG
                    ACCCCACC CC CCCGC
                       C___ CTC
GAM3760 LOC221424 5' TGGGGCGGGGGGGCCCGCACG 84994
                                             AGA G G
                    TGGGGTGG CGGC TG GCG
                    ACCCCGCC GCCG GC TGC
                       CCC G G
GAM3760 LOC221424 5' GGGGTGGAGGCGGCGGC 84993
                                           A GTG
                    GGGGTGGAG CGGC GGC
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С GAM3760 LOC254100 5' TGGGGTGGCGATGGTTGTGA 84995 ACCTGGGGTGG GA GG GTGG ACCCCACC CT CC CACT G A AA GAM3760 LOC256529 5' TGGGGTGAGGATAGACTGGGTG 84996 ____ C G TGGGGTGG AGAC GG GTGG ACCCCACT TCTG CC CACC CCTA A GAM3760 LOC256529 3' TGGGGTGAGGATAGACTGGGTG 84996 ___ C G TGGGGTGG AGAC GG GTGG ACCCCACT TCTG CC CACC CCTA A _ GAM3760 LOC92017 5' TGGGGTGGGGGGGCG 84997 AGAC CGT TGGGGTGG GG GGGCG ACCCCACC CC CCCGC GAM3761 PCDHB16 5' TGAGATTAATGATTAAATAA 85000 A TT A GGATTAATGATTA TAA A TCTAATTACTAAT ATT TT GAM3761 TAP2 3' GGATAATGATTAAAAAC 85001 T TTT GGAT AATGATTA AAC CCTA TTACTAAT TTG TT_{-} GAM3761 FLJ22060 3' TAAGGATTAATATTAATTCAA 85002 ATT TAAGGATTAATG ATTTAA ATTCCTAATTAT TAAGTT AAT GAM3761 FLJ25436 3' TAAGGATAATGATTACTT 85003 Т TAAGGAT AATGATTATTT ATTCCTA TTACTAATGAA GAM3761 NFAT5 3' AGGGGTAAGGAACATTTAACAA 85004 AT T T AGG TAA GA TATTTAACAA TCC ATT CT GTAAATTGTT CC C T _ T GAM3761 LOC146138 3' TAAGGATTAATGTATTAATC 85005 TAAGGATTAATG ATTA TT

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A T
GAM3761 LOC257239 3' AGGGCATGATTATTTAA 85006 ATTA
                    AGG ATGATTATTTAA
                    TCC TACTAATAAATT
                     CG
GAM3761 LOC51279 3' AGGATTAAGTGAAATAACA 85007
                                          _ TTATT
                    AGGATTAA TGA TAACA
                    TCCTAATT ACT ATTGT
                       C TT
GAM3762 ARAF1 3' GAGGAGACAGGGGGCTCA 85010
                                       ACA
                    GAGGA AC GGGG CTCA
                    11111 11 1111 1111
                    CTCCT TG CCCC GAGT
                      CTC
GAM3762 CDC34 3' AGAGGAGACGGGGACCAG 85011
                                        AAC CTCA
                    AGAGGA CGGGGA CCGG
                    TCTCCT GCCCCT GGTC
                      CT_
GAM3762 CIAS1 3' GAGGGACCGGAGAACACTGGC 85012
                                          AA CT C
                    GAGG ACCGGGGA CAC GGC
                    CTCC TGGCCTCT GTG CCG
                     С
                          T A
GAM3762 COL2A1 5' GAGGAAGCGGGAGACCCGGC 85013
                                          AC _ TCA
                    GAGGAA CGGG GAC CCGGC
                    CTCCTT GCCC CTG GGCCG
                      C_ T
                                           AC TCA
GAM3762 COL2A1 5' GAGGAAGCGGGAGACCCGGC 85013
                    GAGGAA CGGG GAC CCGGC
                    CTCCTT GCCC CTG GGCCG
                      C_ T ___
GAM3762 FTL
           5' AGAGGAAATCGGAGGGCGG 85014
                                         C ACTCAC
                    AGAGGAAA CGGGG CGG
                    TCTCCTTT GCCTC GCC
                       A CC_
GAM3762 GDI2 5' AGAGGAAAATGGAGCTGG 85015
                                        CC A CACC
                    AGAGGAAA GGGG CT GG
                    TCTCCTTT CCTC GA CC
                       TA _ _
GAM3762 GP1BB 3' AGGCGGGGACCGGTCCAG 85016
                                        AAAC
                                               CA_
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AGG CGGGGACT CCGG

ATTCCTAATTAC TAAT AG

```
TCC GCCCCTGG GGTC
                          CCA
GAM3762 GP1BB 3' GAGGAGGCGGGGACCGG 85017 AAC CTCA
                   GAGGA CGGGGA CCGG
                   CTCCT GCCCCT GGCC
                     CC
                                     A ACTCAC
GAM3762 MYLK2 3' GAGGGAACCGGGAGCGG
                                85018
                   GAGG AACCGGGG CGG
                   CTCC TTGGCCCT GCC
                    С
                        С
GAM3762 NRXN1 5' AGGGAGGCCACTTCGCCGG 85019 A AACC GG A
                   AG GGA GG ACT C CCGG
                   TC CCT CC TGA G GGCC
                    GG AC
GAM3762 RGS19IP1 3' AGGGGGGCCGGGGACCCCGGC 85020 A AAA
                                                TΑ
                   AG GG CCGGGGAC C CCGGC
                   TC CC GGCCCCTG G GGCCG
                    _ CCC
GAM3762 SLC19A2 5' GGAGGGGACCCGGCCCGG 85021
                                       AACC A
                   GGA GGGGACTC CCGG
                   CCT CCCCTGGG GGCC
                          CCG
                                       _ AA GACTCA
GAM3762 SLC30A3 5' AGAGAGAGGCCGGGCCGG 85022
                   AGAG GA CCGGG CCGG
                   TCTC CT GGCCC GGCC
                    T CC
GAM3762 C17orf31 3' AGAGGCCGGGGACCC 85023
                                     AAA
                   AGAGG CCGGGGACTC
                   TCTCC GGCCCCTGGG
GAM3762 C8orf13 5' GGGCCCTGCTGGGGACTCGCCG 85024 AAA ____
        G
                   GG CC GGGGACTC CCGG
                   CC GG CCCCTGAG GGCC
                    CG_ ACGA
                             С
GAM3762 DGKZ 3' AGCGGGGGCTGGGGACCCGGC 85025 A AAACC
                                                TCA
                   AG GG GGGGAC CCGGC
                   TC CC CCCCTG GGCCG
                    G CCCGA
GAM3762 DKFZp434F054 5' AGAGGGGCCCGGGGACTCAGGC 85026
                                             AAA
                                                    CC
                   AGAGG CCGGGGACTCA GGC
```

```
TCTCC GGCCCCTGAGT CCG
                      CCG
GAM3762 DKFZP434P1750 3' AGAGGGAACTGGGGCAGGAGC 85027 A C ACT CC
                    AGAGG AAC GGGG CA GGC
                    TCTCC TTG CCCC GT TCG
                      C A ___ CC
GAM3762 FLJ10578 5' GGAAACCGCGGCCTCGGC 85028
                                           G A ACC
                    GGAAACCG GG CTC GGC
                    CCTTTGGC CC GAG CCG
                       GG
GAM3762 FLJ13224 3' AGAGGAAAGCGACTCGTTGGC 85029
                                           ACC G ACC
                    AGAGGAA GG GACTC GGC
                    TCTCCTT TC CTGAG CCG
                       G CAA
                                           AAAC A ACC
GAM3762 FLJ20093 5' GAGAGCGCGGGGCTCGCTGGC 85030
                    GAGG CGGGG CTC GGC
                    CTCT GCCCC GAG CCG
                     CGC_ _ CGA
GAM3762 FLJ20847 5' GAGGGGGCTGGAGACCCGGGGC 85031
                                            AAACC
                                                    ACC
                    GAGG GGGGACTC GGC
                    CTCC CCTCTGGG CCG
                     CCCGA
                             CC
GAM3762 FLJ32894 3' GAGGAAACCAGAGTTGG 85032
                                           ACTCACC
                    GAGGAAACCGGGG GG
                    CTCCTTTGGTCTC
                                   CC
                         AA
GAM3762 HEMK 3' AAAGGAAACACCCCTCACTGGC 85033
                                            CGGGGA C
                    AGAGGAAAC CTCAC GGC
                    TTTCCTTTG GAGTG CCG
                       TGGG__ A
GAM3762 IMP13 5' GGAAACCGAGTCCCTGGC 85034
                                          GA CACC
                    GGAAACCGGG CT GGC
                    CCTTTGGCTC GG CCG
                        AG A
GAM3762 KIAA0527 3' AGAGGAAATGGTACTTACTGG 85035
                                          CC GG C C
                    AGAGGAAA GG ACT AC GG
                    TCTCCTTT CC TGA TG CC
                       A_A A_A
GAM3762 KIAA0552 3' AGGGGACACTGGGGACTCTGGC 85036 A A C
                                                   ACC
```

AG GGA AC GGGGACTC GGC

```
TC CCT TG CCCCTGAG CCG
                     CGA
                             Α__
GAM3762 KIAA1274 5' AGAGGGAGCCCGTGCTCACCGG 85037 AA GGGA
        С
                     AGAGG A CCG CTCACCGGC
                    TCTCCT GGC GAGTGGCCG
                      C CG AC
GAM3762 LSM4 5' GGGGACCGGGCTCGCCGGC 85038 AA
                                             GA A
                    GG ACCGGG CTC CCGGC
                    11 11111 111 11111
                    CC TGGCCC GAG GGCCG
                        С
                     CC
GAM3762 MGC16025 5' AAGGAGCCTGGACTCACTGGC 85039
                                           AA GG
                    GAGGA CC GGACTCAC GGC
                    TTCCT GG CCTGAGTG CCG
                      C A
                             Α
GAM3762 OR1F2 5' GAGGAACTCGGAGACACTCACT 85040
                                           AC
                                                __ C
        GG
                     GAGGAA CGGGGAC TCAC GG
                    CTCCTT GCCTCTG AGTG CC
                       GA
                           TG A
GAM3762 P450RAI-2 3' GAGGATGCTGGGGAGACAGGGC 85041
                                            AACC CT CC
                    GAGGA GGGGA CA GGC
                    CTCCT CCCCT GT CCG
                      ACGA CT C
GAM3762 SCLY 3' AAGGAAACTGGGGGTGCACACT 85042 C _____ ACC III
        CGCTGGCG
                         AC GGGG ACTC GGC G
                         TG CCCC TGAG CCG C
                     A CACGTG CGA III
GAM3762 SIAT8C 5' AGGGAAACCGGGGAAATCGG 85043 A
                                             CTCAC
                    AG GGAAACCGGGGA CGG
                    TC CCTTTGGCCCCT GCC
                          TTA
GAM3762 SLAM 3' AGAGGAAACTTGGGCCTGTGGC 85044
                                             CG A CACC
                    AGAGGAAAC GGG CT GGC
                    TCTCCTTTG CCC GG CCG
                        AA _ ACA_
GAM3762 ZDHHC1 5' GGACGGAGACTGGGCCGG 85045
                                          AAC
                                                CA_
                    GGA CGGGGACT CCGG
                    111 11111111 1111
                    CCT GCCTCTGA GGCC
                           CCC
GAM3762 ZER6
            3' GAGAAGCCAACTTACTGG 85046
                                        AA GGG C C
                    GAGGA CC GACT AC GG
```

```
CTCTT GG TTGATGCC
                      C_ __ A A
GAM3762 LOC144455 3' AGAAGAAACCGGGCCCGG 85047
                                             GACTCA
                    AGAGGAAACCGGG CCGG
                    IIII
                    TCTTCTTTGGCCC GGCC
                         G
GAM3762 LOC151199 5' AGAGGCAACCGGAGACCGG 85048
                                          A CTCA
                    AGAGG AACCGGGGA CCGG
                    TCTCC TTGGCCTCT GGCC
                      G
GAM3762 LOC157503 3' AGAAGAAACCTCTGGCTCATTG 85049
                                              GG A CC
        G
                     AGAGGAAACC GG CTCA GG
                    TCTTCTTTGG CC GAGT CC
                        AGA AA
GAM3762 LOC196951 5' GAGGAAACTGGGTGAAAGGC 85050
                                           C CTCACC
                    GAGGAAAC GGG GA GGC
                    CTCCTTTG CCC CT CCG
                       A A TT____
GAM3762 LOC219575 5' AGAGGAAACTGGGAGAGG 85051
                                          C _ CTCACC
                    AGAGGAAAC GGG GA
                                     GG
                    TCTCCTTTG CCC CT CC
                       ΑТ
GAM3762 LOC253664 5' AGAGGATCGGGGACCC 85052
                                          AAC
                    AGAGGA CGGGGACTC
                    TCTCCT GCCCCTGGG
GAM3762 LOC90141 3' AAGGAAACTGGCACCATTGGC 85053 CG G T CC
                    GAGGAAAC GG AC CA GGC
                    TTCCTTTG CC TG GT CCG
                       A_G G AA
GAM3762 LOC92283 3' AGAGGAAACCTGACTG
                                 85054
                                          GGG CACC
                    AGAGGAAACC GACT G
                    TCTCCTTTGG CTGA C
                        Α___
GAM3763 FLJ31101 3' TAAGTTAATAATAATGTATTGG 85057
                                            A A GA
                    TAAGTTAATGA TAA GTA TGG
                    ATTCAATTATT ATT CAT ACC
                        _ A A_
GAM3763 JAM1 3' TAAGTTAATAAATAGACTGGTG 85058
                                             AA___ A
```

TAAGTTAATGAATA GT GATGG

GATGG

```
CTGAC C
GAM3763 JAM1 3' TAAGTTAATAAATAGACTGGTG 85058 AA A
        GATGG
                       TAAGTTAATGAATA GT GATGG
                    ATTCAATTATTTAT CA CTACC
                         CTGAC C
            3' TAAGTTAATAAATAGACTGGTG 85058
GAM3763 JAM1
                                            AA___ A
        GATGG
                       TAAGTTAATGAATA GT GATGG
                    ATTCAATTATTTAT CA CTACC
                         CTGAC C
GAM3763 JAM1
            3' TAAGTTAATAAATAGACTGGTG 85058
                                            AA___ A
        GATGG
                       TAAGTTAATGAATA GT GATGG
                    ATTCAATTATTTAT CA CTACC
                         CTGAC C
GAM3763 KIAA0417 3' TTAATGAATTTCAGCAGGTGG 85059
                                           AA A
                    TTAATGAAT AGTAG TGG
                    AATTACTTA TCGTC ACC
                       AAG C
GAM3763 KIAA1946 3' GTTAAGAAAAGTAGATGG 85060
                                        TT
                    GTTAA GAA AAAGTAGATGG
                    CAATT CTT TTTCATCTACC
GAM3763 P15-2 3' TAAGTTATTGAATAAATG 85061 A AAGTA
                    TAAGTTA TGAATA GATG
                    ATTCAAT ACTTAT TTAC
GAM3763 SETBP1 3' TAAGTTAATGAAAAGATATATG 85062
                                            TA TAG
        G
                    TAAGTTAATGAA AAG ATGG
                    ATTCAATTACTT TTC TACC
                         __ TATA
GAM3763 LOC149117 3' GTTAATAAATAATTGATTGATG 85063
        G
                     GTTAATGAATAA GT GATGG
                    CAATTATTTATT TA CTACC
                         AAC A
GAM3763 LOC221830 3' GTTATACAAAGTAGATGG 85064
                                         ATGA
                    GTTA ATAAAGTAGATGG
                    CAAT TGTTTCATCTACC
GAM3764 EPB72 3' TTTAAGGGTTAGAGTAAT 85067 T
                                          Α
```

TTT AGGGTTA AGTAAT

ATTCAATTATTTAT CA CTACC

```
AAA TCCCAAT TCATTA
```

T C

GAM3764 PON1 3' TTTTAGGGTAAGTACTTT 85068 TA AAT

TTTTAGGGT AAGT ACTTT

AAAATCCCA TTCA TGAAA

GAM3764 NDUFB5 3' TTTTAGAGTTGGTTCAATACTT 85069 AAAG

TA TTTTAGGGTT TAATACTTTA

AAAATCTCAA GTTATGAAAT

CCAA

GAM3765 CD28 3' ACAGCATTAAATAGGAACTACG 85072 A GGG

ACG CATTAAATAGGAA ACG

TGT GTAATTTATCCTT TGC

C GA_

GAM3765 GPRK6 3' CGCACACAGGAAGGGCG 85073 A TAA A

CG CAT ATAGGAAGGG CG

GC GTG TGTCCTTCCC GC

С

GAM3765 PPP2R4 3' ACGAACAGAGGGAGGGATGG 85074 TTAAATA A C

ACGA CA GGA GGGA GG

TGCT GT CCT CCCT CC

T CTC___ C A

GAM3765 EREG 3' ATTAAATAGGAAACAG 85075 AGG

ATTAAATAGGA GACGG

TAATTTATCCT TTGTC

GAM3765 FLJ25467 3' GACATTAAGGGGAGAC 85076 AAT AA

GACATTA AGG GGGAC

1111111 111 11111

CTGTAAT TCC CTCTG

___ C_

GAM3765 HCA127 3' ACATTAAATAGGAGAC 85077 AGG

ACATTAAATAGGA GAC

TGTAATTTATCCT CTG

GAM3765 IL22R 3' GACACTGGGTAGGGACAG 85078 AAATA A

GACATT GG AGGGACGG

CTGTGA CC TCCCTGTC

C____ A

GAM3765 KIAA0993 3' GACATTAAATGGTAAAGG 85079 A _

GACATTAAAT GG AAGGG

```
CTGTAATTTA CC TTTCC
```

_ A

GAM3765 MGC13053 3' ATTAAAGAAGGGGGGGGGG 85080 T_ AA A

ATTAAA AGG GGG CGG

TAATTT TCC CCC GCC

CT CC

GAM3765 NKX2B 3' ACGACATTAACGCTGGGACGG 85081

ACGACATTAA GGGACGG

ATAGGAA

TGCTGTAATT CCCTGCC

GCGA

GAM3765 RPS6KA4 3' CCAAAGAGGGAGGGTGG 85082 T AC

TTAAA AGGAAGGG GG

GGTTT TCCTTCCC CC

C CA

GAM3765 LOC126364 3' CGGCATGAGGGACAGGGAGGGG 85083 A TAA__ A A_

GCGG CG CAT ATAGG AGGG CGG

GC GTA TGTCC TCCC GCC

C CTCCC C CC

GAM3765 LOC254159 5' GACATCGGGAAGGGACGG 85084 AAATA

GACATT GGAAGGGACGG

CTGTAG CCTTCCCTGCC

С

GAM3766 KIAA1946 3' TATCTGCACATATTTTAT 85087 C

TGTC GCACATATTTTAT

ATAG CGTGTATAAAATA

Α

GAM3766 LOC51207 5' ATGCTGTTTGCATCTCCTAT 85088 CC CATA

GTGCTGT GCA TTTTAT

TACGACA CGT AGGATA

AA AG__

GAM3767 IL8 3' TGATGCTTCAAATATCACAT 85091 ATA TG

TGATGC T AATATCACAT

ACTACG A TTATAGTGTA

A GT

GAM3767 FLJ10895 3' TTCGATGCATATTGTGGCAGTC 85092 AATA

AC TTTGATGCATATTG TCAC

AAGCTACGTATAAC AGTG

ACCGTC

GAM3767 LOC203369 3' TTTGTGCATGGAGGTATCACAT 85093 A ATT A_

TTTG TGCAT GA TATCACAT

```
AAAC ACGTA CT ATAGTGTA
```

_ C_ CC

GAM3768 FCGR2A 3' GAAACAATCACTTTTAATTT 85096 AT

GAAACG GTTATTTTAATTT

CTTTGT TAGTGAAAATTAAA

GAM3769 ATP2B4 3' TGGGGTGATGCCAAGAGGATTG 85099 AAG ____ AAC

TCA TGG GATGTT GGA TGTCA

ACC CTACGG CCT ACAGT

CCA TTCT A

GAM3769 DPYD 3' AGGGCAATTTGGAAACTGTCAC 85100 ATG

AGG TTGGAAACTGTCAC

TCC AACCTTTGACAGTG

CGTTA

GAM3769 GAD1 3' GGGAGGGTGTGACTTGTCA 85101 A A T AAAC

GG AGG TGT GG TGTCA

CC TCC ACA CT ACAGT

C C _ GA__

GAM3769 GAD2 3' TGGGGGAATGTTGATGTCA 85102 AA AAAC

TGG GGATGTTGG TGTCA

ACC CTTACAACT ACAGT

CC

GAM3769 MAPK4 3' GAAGGATGTTGGGTC 85103 AAACT

GAAGGATGTTGG GTC

CTTCCTACAACC CAG

GAM3769 NOTCH2 3' TAGAAGGAATGAGAACTGTCA 85104 TGT GA

TGGAAGGA TG AACTGTCA

ATCTTCCT AC TTGACAGT

T__ TC

GAM3769 PXN 3' TGGAGTGGTTTGGACTGTCAC 85105 A GATG AA

TGGA G TTGGA CTGTCAC

ACCT C AACCT GACAGTG

_ ACCA

GAM3769 STAT1 3' AGAAGGAAAACTGTC 85106 TGTTGG

GGAAGGA AAACTGTC

TCTTCCT TTTGACAG

GAM3769 ARHGEF9 3' TGAGAGGATGTTGGAAAC 85107 GA

TG AGGATGTTGGAAAC

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AC TCCTACAACCTTTG
                     TC
GAM3769 ARHU 3' GAAGGATGTATTTCACTGTCAC 85108
                                          TGGAA
                    GAAGGATGT ACTGTCAC
                    CTTCCTACA TGACAGTG
                       TAAAG
GAM3769 C20orf18 5' GGGGGGGCCGGAAAAATTGTC 85109 AA AT
                                                 C__
                    GG GG GTTGGAAA TGTC
                    CC CC CGGCCTTT ACAG
                     CC TTA
GAM3769 C20orf18 5' GGGGGGGCCGGAAAAATTGTC 85109 AA AT
                                                 C__
                    GG GG GTTGGAAA TGTC
                    CC CC CGGCCTTT ACAG
                     CC
                           TTA
GAM3769 DKFZp434G179 3' GATTGTTGGAAGCTGTCA 85110 A
                    GG TGTTGGAA CTGTCA
                    CT ACAACCTT GACAGT
                    Α
                        С
GAM3769 FLJ14957 3' GGCATGCCTGGGGACTGTCAC 85111 _ _ AA
                    GG ATGT TGG ACTGTCAC
                    CC TACG ACC TGACAGTG
                     G G CC
GAM3769 GALNT11 3' GGGAGGACAGGGAACTGTCA 85112 A GTT A
                    GG AGGAT GGAA CTGTCA
                    CC TCCTG CCTT GACAGT
                     C TC_ _
GAM3769 KIAA0247 3' TGGAGGAAGAAGCTGTCA 85113 A TGTT A
                    TGGA GGA GGAA CTGTCA
                    ACCT CCT TCTT GACAGT
                     _ ___ C
GAM3769 KIAA0453 3' TGGAAGGATTTGGGTC
                                         G AAACT
                               85114
                    TGGAAGGAT TTGG GTC
                    ACCTTCCTA AACC CAG
```

GAM3769 KIAA0563 5' TGGGAGGAGGCTGAACTGTCA 85115 A T AA
TGG AGGA GTTGG ACTGTCA
||| |||| ||||| ||||||
ACC TCCT CGACT TGACAGT
C C ____

GAM3769 KIAA1189 3' GGAAGGATTAAAGAAGTTGTCA 85116 GTT AC
GGAAGGAT GGAA TGTCA
|||||||| ||||

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ATT CA
                                         AT GAAA
GAM3769 KIAA1582 5' TGGAAGGGTTGCCTGTC 85117
                    TGGAAGG GTTG CTGTC
                    ACCTTCC CAAC GACAG
                       __ G__
GAM3769 NETO2 3' TGGAATGAATGGGCTGTCA 85118
                                            TT AAA
                    TGGAA GGATG GG CTGTCA
                    ACCTT CTTAC CC GACAGT
GAM3769 LOC147071 5' TGGGAGGAGGCTGAACTGTCA 85115
                                           A T AA
                    TGG AGGA GTTGG ACTGTCA
                    ACC TCCT CGACT TGACAGT
                     C C
GAM3769 LOC149832 3' GGGAGGCTGTGGGGACTGTCAC 85119 A A T AA
                    GG AGG TGT GG ACTGTCAC
                    CC TCC ACA CC TGACAGTG
                     C G \_ CC
GAM3769 LOC150299 3' TGGAAGGAGGTTCTGCGGCTGT 85120
                                               T GGAAA
                    TGGAAGGA GTT CTGT
                    ACCTTCCT CAA
                                 GACA
                       C GACGCC
GAM3769 LOC152286 5' GGAAGGCTGGTGGAACTGTCAC 85121
                                             A T A
                    GGAAGG TG TGGAA CTGTCAC
                    CCTTCC AC ACCTT GACAGTG
                       G C
GAM3769 LOC162461 3' TGGGGGGTGGGCGGAAACTGTC 85122
                                             AAAT
        AC
                     TGG GG TG TGGAAACTGTCAC
                    ACC CC AC GCCTTTGACAGTG
                      CC CC
GAM3769 LOC200681 5' GAAGGATGACTAGGGCTGTCAC 85123
                                                AAA
                    GAAGGATG TTGG CTGTCAC
                     CTTCCTAC GATC GACAGTG
                        T CC
GAM3769 LOC201173 5' TGGGAGGAGGCTGAACTGTCA 85115 A T AA
                    TGG AGGA GTTGG ACTGTCA
                    ACC TCCT CGACT TGACAGT
                      C C
GAM3769 LOC201220 5' TGGGAGGAGGCTGAACTGTCA 85115 A T AA
```

TGG AGGA GTTGG ACTGTCA

CCTTCCTA TCTT ACAGT

```
ACC TCCT CGACT TGACAGT
                     CC
GAM3769 LOC92181 3' GAGGGAGGAAAATTGTCA 85124 A TGTT C
                    GA GGA GGAAA TGTCA
                    CT CCT CCTTT ACAGT
                    C ____ TA
GAM3770 FTSJ2 3' AACTGGAAATCTGTGCGTGG 85127 C T __ _
                    AAC GGA ATCT GCG GG
                    TTG CCT TAGA CGC CC
                     A T CA A
GAM3770 KCNA6 5' ACCTGGGCGCTGGGGATTT 85128
                                        _ ATATC _
                    ACC GG TGC GGGGATTT
                    TGG CC GCG CCCCTAAA
                     A C A
                                      ATC C
GAM3770 BA108L7.23' GGATTGGAGGATTTA
                               85129
                    GGAT TG GGGGATTTA
                    CCTA AC CTCCTAAAT
GAM3770 FLJ31153 3' CAGATATTGCAGATTTAA 85130 C GG
                    CGGATAT TGC GGATTTAA
                    GTCTATA ACG TCTAAATT
GAM3770 MAP2K6 5' GGACATCTGCATATCTTAA 85131
                                           GGGA
                    GGATATCTGCG TTTAA
                    CCTGTAGACGT GAATT
                        ATA
            3' CCTGGATGTTAAGGATTTA 85132 ATCTGC
GAM3770 NRM
                    CC GGAT GGGGATTTA
                    GG CCTA TTCCTAAAT
                    A CAA
            3' CCTGGATGTTAAGGATTTA 85132 _ ATCTGC
GAM3770 NRM
                    CC GGAT GGGGATTTA
                    GG CCTA TTCCTAAAT
                    A CAA
GAM3770 NRM
            3' CCTGGATGTTAAGGATTTA 85132 _ ATCTGC
                    CC GGAT GGGGATTTA
                    TTCCTAAAT
                    GG CCTA
                    A CAA
GAM3771 FLJ12598 5' CATGGTACCTGTAAATGACAT 85135
                                         A AT C
                    TATGGTGC CT GTAAA GACAT
```

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GTACCATG GA CATTT CTGTA
```

_ __ A

GAM3771 FLJ13195 3' TATGATGCATTGAGGATGACAT 85136 CTA TAAAC

TATGGTGCA TG GACAT

ATACTACGT AC CTGTA

A TCCTA

GAM3771 LOC143146 3' TATGGTACCTTCGTAAGTGACA 85137 A A AC

T TATGGTGC CT TGTAA GACAT

ATACCATG GA GCATT CTGTA

A CA

GAM3772 ADAR 3' CACTTGGGGGAAAAAAGGGG 85140 TGA

CACTTGG GAGAAAGGGG

111111 111111111

GTGAACC TTTTTTCCCC

CCC

GAM3772 ADAR 3' CACTTGGGGGAAAAAAGGGG 85140 TGA

CACTTGG GAGAAAGGGG

GTGAACC TTTTTTCCCC

CCC

GAM3772 ADAR 3' CACTTGGGGGAAAAAAGGGG 85140 TGA

CACTTGG GAGAAAGGGG

111111 111111111

GTGAACC TTTTTTCCCC

CCC

GAM3772 BARHL1 3' CCTGGGGAGAAAGGGG 85141 TGA

CTTGG GAGAAAGGGG

GGACC CTCTTTCCCC

C__

GAM3772 BDNF 5' CACCTGGTGGAACTCGGGG 85142 A AAA

CACTTGGTG GAG GGGG

GTGGACCAC CTT CCCC

_ GAG

GAM3772 CMKLR1 3' CACTAGAAGAAGGG 85143 T TGA

CACT GG GAGAAAGGG

GTGA TC TTCTTTCCC

GAM3772 COL2A1 3' CTTAGAAAGAGAGGGG 85144 T AA

CTTGG GAGAGA GGGG

11111 111111 1111

GAATC TTCTCT CCCC

Τ

GAM3772 COL2A1 3' CTTAGAAAGAGAGGGG 85144 T AA

CTTGG GAGAGA GGGG

GAATC TTCTCT CCCC

Т

GAM3772 COL4A4 5' CCTGGTAAGTTGGGAGGGAGGG 85145 ____ AA III GC CTTGGTGA GAG AGGGG C GGACCATT CTC TCCCC G CAACC CC III GAM3772 COX10 3' TGGCAGCGGAGGGAAAGGGG 85146 TGGT GAG GAAAGGGG ACCG CTC CTTTCCCC TCGC C GAM3772 DMPK 5' CTGGGTGGGAGAAAGGGG 85147 T A CT GGTG GAGAAAGGGG 11 1111 1111111111 GA CCAC CTCTTTCCCC CC GAM3772 DPYSL2 3' CTTGGTGAGAGACGGGG 85148 AA CTTGGTGAGAGA GGGG GAACCACTCTCT CCCC G_{-} GAM3772 DRD5 3' CATTTGTTTAAAAAGGGAGGGG 85149 C GT AA CATTG GAGAG AGGGG GT AAC TTTTC TCCCC A AAAT CC GAM3772 F13A1 3' CCTGACCCCGAGAAAGGGG 85150 TGA CTTGG GAGAAAGGG GGACT CTCTTTCCCC **GGGG** GAM3772 FKBP1A 3' CACATACGAGGAGAAAGGGG 85151 TTG CAC GTGAG AGAAAGGGG GTG TGCTC TCTTTCCCC TA_ C GAM3772 GABRE 3' CTATCTGCAGAGAAAGGGG 85152 TGG _ CT TG AGAGAAAGGGG GA AC TCTCTTTCCCC TAG G GAM3772 GABRE 3' CTATCTGCAGAGAAAGGGG 85152 TGG CT TG AGAGAAAGGGG GA AC TCTCTTTCCCC TAG G GAM3772 GABRE 3' CTATCTGCAGAGAAAGGGG 85152 TGG _ CT TG AGAGAAAGGGG

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GA AC TCTCTTTCCCC
                     TAG G
GAM3772 GABRE 3' CTATCTGCAGAGAAAGGGG 85152 TGG _
                     CT TG AGAGAAAGGGG
                     GA AC TCTCTTTCCCC
                     TAG G
GAM3772 GGA3
             3' CATCTGGTGAGAGGAGAGGG 85153 C
                                               AA
                     CA TTGGTGAGAG AGGG
                     GT GACCACTCTC TCCC
                     Α
                          CTC
GAM3772 GGA3
             3' CATCTGGTGAGAGGAGAGGG 85153
                                               AA
                     CA TTGGTGAGAG AGGG
                     GT GACCACTCTC TCCC
                          CTC
GAM3772 GRB7 5' CTGAGCGAGAGAGGGG
                                  85154 T
                                            AA
                     CT GGTGAGAGA GGGG
                     GA TCGCTCTCT CCCC
                      С
GAM3772 H1F0
            3' CACTTGTTTAAAAAAGGGG 85155
                                          GTGA
                     CACTTG GAGAAAGGGG
                     GTGAAC TTTTTTCCCC
                       AAA
GAM3772 INPP5A 3' CACCTGGCAGAGGGG
                                          G AAA
                                  85156
                     CACTTGGT AGAG GGG
                     GTGGACCG TCTC CCC
GAM3772 IVD
            3' CACTAGGTGCAGGAAAAGGGG 85157
                                          T AG
                     CACT GGTG AG AAAGGGG
                     GTGA CCAC TC TTTCCCC
                      T G CT
GAM3772 KIF5C 3' CACTTCGAAAGAGGG
                                 85158
                                        GG
                                             AA
                     CACTT TGAGAGA GGG
                     11111 1111111 111
                     GTGAA GCTTTCT CCC
GAM3772 MECP2 3' CACTGCGGGGAGAGGGG
                                   85159
                                          _{-} T AAA
                     CACT TGG GAGAG GGG
                     GTGA GCC CTCTC CCC
                      C C
GAM3772 MLLT2 3' ACTTGATATCTGAGGGGG 85160
                                           A__ AAA
                     ACTTGGTG GAG GGGG
```

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TGAACTAT CTC CCCC
                       AGA ___
GAM3772 NAGA 3' CACTTTGGAAAAGGAGGGG 85161 _ T AA
                    CACTT GG GAGAG AGGGG
                    GTGAA CC TTTTC TCCCC
                      A _ C_
GAM3772 NEDD4L 3' CAGTTGGTGAGGACAGG 85162 C A A
                    CA TTGGTGAG GA AGG
                    11 11111111 11 111
                    GT AACCACTC CT TCC
                     C G
GAM3772 NF2
           5' CCTGAGCGGAAAGGGG 85163
                                      _ AGA
                    CTTG GTG GAAAGGGG
                    GGAC CGC CTTTCCCC
                     Т
GAM3772 NGFR 3' CACCTAGCAGTGTGGGAGAAGG 85164
                                            ____ A A III
        GGGC
                      CTTGGT G GAGAA GGGG C
                    GGATCG C CTCTT CCCC G
                      TCACA C C III
GAM3772 PCDH11X 5' ACCGAGGGGGAGAAAGGGG 85165 T TGA
                    ACT GG GAGAAAGGGG
                    TGG CC CTCTTTCCCC
                     CT CC
GAM3772 PIM1 3' CATCTGACAAGAGAGGGG 85166 C TG AA
                    CATTGG AGAGA GGGG
                    GT GACT TCTCT CCCC
                    A GT
                                     G AAA
GAM3772 PXN
            3' CACCTGTGAAAGGGG
                               85167
                    CACTTG TGAGAG GGG
                    GTGGAC ACTTTC CCC
GAM3772 RAB5C 5' CACTTAGTGGGGAGGGGG 85168
                                        A_ AAA
                    CACTTGGTG GAG GGGG
                    GTGAATCAC CTC CCCC
                       CC _
GAM3772 RARA 3' GGCAGAGGGAGAAAGGGG 85169
                    GGT GA GAGAAAGGGG
                    CCG CT CTCTTTCCCC
                     T CC
GAM3772 RARG
            3' CACCTGGCAGAGGAAGGGG 85170
                                          G A
                    CACTTGGT AGAG AAGGGG
```

_ C GAM3772 RPL10 3' TTGGTGAGTATTAAGAGGGGGG 85171 AA TTGGTGAG AGA GGGG AACCACTC TCT CCCC ATAAT CC GAM3772 RUNX3 3' CACCTAGGGGAAAGGGG 85172 **TGAGA** CACTTGG GAAAGGGG GTGGATC CTTTCCCC CC GAM3772 SLC39A1 3' TTGAGAAAGAGGAAGGGG 85173 _ T A TTG G GAGAG AAGGGG AAC C TTCTC TTCCCC TT C GAM3772 SLC7A8 3' ACAAAAGCAGAGAGAGGGG 85174 TT G A AC GGT AGAGA AGGGG TG TCG TCTCT TCCCC TTT _ C GAM3772 SLC9A3R1 3' CATTTGTCAAGAAAGGGG 85175 C GTGA CATTG GAGAAAGGGG GT AAC TTCTTTCCCC A AG GAM3772 SLN 3' TGGTGAGACAGATCAGGGG 85176 __ A_ TGGTGAGA GA AGGGG ACCACTCT CT TCCCC GT AG GAM3772 SNRPN 5' CACTGGTAAAAGGGG 85177 T AAACACT GGTGAGAG GGG GTGA CCATTTTC CCC GAM3772 SNRPN 5' CACTGGTAAAAGGGG 85177 T AAA CACT GGTGAGAG GGG GTGA CCATTTTC CCC GAM3772 SNRPN 5' CACTGGTAAAAGGGG 85177 Т AAACACT GGTGAGAG GGG GTGA CCATTTTC CCC GAM3772 SNRPN 5' CACTGGTAAAAGGGG 85177 Т AAA CACT GGTGAGAG GGG

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GAM3772 TAL1 5' CACTCCGCCGGAAAGGGG 85179
                                        G GAGA
                    CACTT GT GAAAGGGG
                    GTGAG CG CTTTCCCC
                      G GC
GAM3772 TAL1
            3' ACTTAAAAGGAAGGGG
                                85178
                                      TGG A
                    ACT TGAGAG AAGGGG
                    TGA ATTTTC TTCCCC
                         С
GAM3772 THRA
            3' CCAGGCAGAGAAAGGGG 85180 T G
                    CT GGT AGAGAAAGGGG
                    GG CCG TCTCTTTCCCC
                     Т
GAM3772 TIAM1 5' ACTAGGTGAGAGACTAGG 85181 T
                                            AA
                    ACT GGTGAGAGA GGG
                    TGA CCACTCTCT TCC
                     Т
                         GA
GAM3772 TRPM1 5' CACTTGGCAGAGGGGGG
                                          G AAA
                                 85182
                    CACTTGGT AGAG GGGG
                    GTGAACCG TCTC CCCC
                       _ C__
GAM3772 BOP
            5' TTGGTGAGAAATTTGGGG 85183
                                          AA
                    TTGGTGAGAGA GGGG
                    AACCACTCTTT CCCC
                        AAA
GAM3772 C11orf23 3' CACCCGGGAAAGGGG
                                        TGAGA
                                85184
                    CACTTGG GAAAGGGG
                    GTGGGCC CTTTCCCC
GAM3772 CCNI
            5' ACTGAGGAGGAGAAAGGGG 85185
                                         T_ TGA
                    ACT GG GAGAAAGGGG
                    TGA CC CTCTTTCCCC
                     CT TCC
GAM3772 CNNM2 3' CTTCCTGAGGGAAAGGGG 85186
                                        GG A
                    CTT TGAG GAAAGGGG
                    GAA ACTC CTTTCCCC
                     GG C
                                             GG A A
GAM3772 DKFZp434K1210 3' ACTCTGAGGGAGAGGGG
                                      85187
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ACTT TGAG GA AGGGG

```
TGAG ACTC CT TCCCC
                      __ сс
GAM3772 DKFZP547E1010 5' CATTTGGTAAGATAGGG 85188 C
                                                 GAA
                    CATTGGTGAGA AGGG
                    GT AACCATTCT TCCC
                     Α
                         Α
GAM3772 DKFZP547E1010 5' CATTTGGTAAGATAGGG
                                      85188 C
                                                 GAA
                    CA TTGGTGAGA AGGG
                    GT AACCATTCT TCCC
                          A___
GAM3772 DKFZP564D0478 3' CTTGGTGACAACGTGAAGGGG 85189
                                                 G A
                    CTTGGTGA AG AAGGGG
                    GAACCACT TT TTCCCC
                        G GCAC
GAM3772 DKFZP564O0823 3' CTTGTACCAGAAAGGGG 85190 G AG
                    CTTG TG AGAAAGGGG
                    GAAC AT TCTTTCCCC
                      _ GG
GAM3772 DKFZP566I1024 3' CATCCAGGGAGAAAGGGG 85191 T TGA
                    CA CT GG GAGAAAGGGG
                    GT GG CC CTCTTTCCCC
                     A T _
GAM3772 DKFZp586I021 3' ACCTGGCACCCAGAGAGGGG 85192 AG_ A
                    ACTTGGTG AGA AGGGG
                    TGGACCGT TCT TCCCC
                        GGG C
                                         TGG AG
GAM3772 DNCH1 3' CACTATTACAGAAAGGGG 85193
                    CACT TG AGAAAGGGG
                    GTGA AT TCTTTCCCC
                      TA_ G_
GAM3772 ELF4 3' CTCGGAAAGAGGGAAGGGG 85194
                                          т а
                    CTTGG GAGAG AAGGGG
                     GAGCC TTCTC TTCCCC
                      T CC
GAM3772 FLJ00001 3' ACTTTCCAGAGAGAAAGGGG 85195
                                           GGT
                    ACTT GAGAGAAAGGGG
                    TGAA CTCTCTTTCCCC
                      AGGT
GAM3772 FLJ10743 3' ACTTGGTGAGAACTGGG 85196
                                            AAA
                    ACTTGGTGAGAG GGG
```

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TGAACCACTCTT CCC
                         GA_
GAM3772 FLJ11506 3' TGGCTTTAAAGAGAAAGGGG 85197
                    TGGT GAGAGAAAGGGG
                     ACCG TTCTCTTTCCCC
                      AAAT
GAM3772 FLJ12529 3' TTGGAGGAAAGGGAAGGGG 85198 T_ A_
                    TTGG GAGAG AAGGGG
                     AACC CTTTC TTCCCC
                      TC CC
GAM3772 FLJ20308 3' ACATCAGTGAGGGAAAGGGG 85199 TG A
                    AC T GTGAG GAAAGGGG
                    TG A CACTC CTTTCCCC
                     TGT C
GAM3772 FLJ20337 3' CACCTGGTGAGAAAAGG 85200
                                              Α
                    CACTTGGTGAGAGAA GG
                    GTGGACCACTCTTTT CC
GAM3772 FLJ20452 3' ACTTAGTGGGAGGAATAGGG 85201
                                             Α _ _
                    ACTTGGTG GAG AA AGGG
                     TGAATCAC CTC TT TCCC
                        CCA
GAM3772 FLJ21195 3' CACTTCGCGCGGGAAAGGGG 85202
                                            G AGA
                    CACTT GTG GAAAGGGG
                    GTGAA CGC CTTTCCCC
                      G GCC
GAM3772 FLJ23309 3' ACTTGGTAAGATGGAGAGGGG 85203
                                               Α
                    ACTTGGTGAGA GA AGGGG
                    TGAACCATTCT CT TCCCC
                         AC C
GAM3772 GAL3ST-4 3' CTTGGGGCAGGAAAGGGG 85204
                                           TG_ A
                     CTTGG AG GAAAGGGG
                     GAACC TC CTTTCCCC
                      CCG _
GAM3772 HXCP2 3' CACGTGGACACAGGGAAGGGG 85205
                                           T TG__ A A
                     CAC TGG AG GAA GGGG
                     GTG ACC TC CTT CCCC
                      C TGTG C _
GAM3772 JAM1
            3' CACTTGGTGGAACAGG 85206
                                          A AA
```

CACTTGGTG GAG AGG

```
GTGAACCAC CTT TCC
                       _ G_
GAM3772 JAM1
            3' CACTTGGTGGAACAGG 85206
                                         A AA
                    CACTTGGTG GAG AGG
                    GTGAACCAC CTT TCC
                       _ G_
            3' CACTTGGTGGAACAGG
GAM3772 JAM1
                                85206
                                         A AA
                    CACTTGGTG GAG AGG
                    GTGAACCAC CTT TCC
                       G
GAM3772 JAM1
            3' CACTTGGTGGAACAGG 85206
                                         A AA
                    CACTTGGTG GAG AGG
                    GTGAACCAC CTT TCC
                       G
GAM3772 KCND1 5' ACTAAATAAGAGGAAGGGG 85207
                                         TG A
                    ACT GTGAGAG AAGGGG
                    TGA TATTCTC TTCCCC
                     TT C
GAM3772 KIAA0121 5' TTGGAAAGAAGAGAAAGGGG 85208 T
                    TTGG GAGAGAAAGGGG
                    AACC TTCTCTTTCCCC
                      TTTCT
GAM3772 KIAA0189 3' CTCTGCTTGAGAAAGGGG 85209 G GA
                    CTT GT GAGAAAGGGG
                    GAG CG CTCTTTCCCC
                     A AA
GAM3772 KIAA0280 3' ACTTGGTGACCAAGGGG 85210
                                           GAGA
                    ACTTGGTGA AAGGGG
                    TGAACCACT TTCCCC
                        GG
GAM3772 KIAA0316 3' ACTTGGAAAGAAAGGGG
                                         TG
                                  85211
                    ACTTGG AGAGAAAGGGG
                    TGAACC TTTCTTTCCCC
GAM3772 KIAA0789 5' TGGCTTTAAGGAAAGGGG 85212
                                         ___ A
                    TGGT GAG GAAAGGGG
                    ACCG TTC CTTTCCCC
                      AAA _
GAM3772 KIAA0864 3' CACATGGTGAGACAGGG 85213 T
                                            GAA
```

CAC TGGTGAGA AGGG

```
GTG ACCACTCT TCCC
                    Т
                        G__
GAM3772 KIAA0939 3' CACCTGGTGACGAGGGGG 85214
                                         AAA
                   CACTTGGTGA GAG GGGG
                   GTGGACCACT CTC CCCC
                       G _
A___ AA
        G
                   CACTTGGTG GAG AGGGG
                   GTGAACCGC CTC TCCCC
                      CCCC CC
GAM3772 KIAA1001 3' CTTAAAAGGAGAGGAAGGGG 85216
                                        T A
                   CTTGG GAGAG AAGGGG
                   GAATT CTCTC TTCCCC
                     TTC C
GAM3772 KIAA1246 5' CATTTAGCAAGAAGAAGGGG 85217 C TG GA
                   CATTGG AGA AAGGGG
                   GT AATC TCT TTCCCC
                    A GT TC
GAM3772 KIAA1344 3' ACAAGAAGAGGGAAGGGG 85218 TT T A
                   AC GG GAGAG AAGGGG
                   TG TC TTCTC TTCCCC
                    T_ _ C
GAM3772 KIAA1399 5' CACTTGATGAGGCAAGG 85219
                                        AGA
                   CACTTGGTGAG AAGG
                   GTGAACTACTC TTCC
                       CG
GAM3772 KIAA1805 3' CCTACTAAAAGGGGAGGG 85220 G AA
                   CTTG TGAGAG AGGGG
                   GGAT ATTTTC TCCCC
                    G
                       CCC
GAM3772 KIAA1904 3' CACTCATGGAAAGGG
                                      G AGA
                               85221
                   CACTTG TG GAAAGGG
                   GTGAGT AC CTTTCCC
GAM3772 KIAA1915 3' ACTGGTGAGGAGCATGGGG 85222
                                       Т
                                          _{-} AAA
                   ACT GGTGAG AG GGGG
                   TGA CCACTC TC CCCC
                    C GTA
GAM3772 MEP50 3' CACATCAAGAGAAAGGGG 85223
                                     TTGG
```

CAC TGAGAGAAAGGGG

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GTG GTTCTCTTTCCCC
                     TA
GAM3772 MGC10818 3' CACTTGGTAAGGGAAAGG 85224
                                             Α
                    CACTTGGTGAG GAAAGG
                    GTGAACCATTC CTTTCC
                        C
GAM3772 MGC10981 3' CACTTGGTGGAGCTGGG
                                   85225
                                           A AAA
                    CACTTGGTG GAG GGG
                    GTGAACCAC CTC CCC
                        GA
GAM3772 MGC11266 3' CACCTGGCAGGGGAGGGG 85226
                                            G AGAA
                    CACTTGGT AG AGGGG
                    GTGGACCG TC TCCCC
                       CCC
GAM3772 MGC4415 3' TGGTTTGGAAAGGAAGGGG 85227
                    TGGT GAGAG AAGGGG
                    ACCA CTTTC TTCCCC
                      AAC C
GAM3772 MGC4604 3' CTCAGTAGAGAAAGGGG
                                  85228 TG G
                    CT GT AGAGAAAGGGG
                    GA CATCTCTTTCCCC
                     GT _
GAM3772 PAK6
            3' ACTTAGTGGGAGAGAGGGG 85229
                                          A A
                    ACTTGGTG GAGA AGGGG
                    TGAATCAC CTCT TCCCC
                       C C
GAM3772 PDE8B 3' CCTTTTACAGGAAAGGGG 85230
                                        GG A
                    CTT TG AG GAAAGGGG
                    GGA AT TC CTTTCCCC
                     AA G _
GAM3772 PLSCR3 3' ACATGGAGGAAAGGGG
                                  85231 T TG A
                    AC TGG AG GAAAGGGG
                    TG ACC TC CTTTCCCC
                     T __ _
GAM3772 PLSCR3 3' ACATGGAGGAAAGGGG 85231 T TG A
                    AC TGG AG GAAAGGGG
                    TG ACC TC CTTTCCCC
                     T ___ _
GAM3772 PLUNC 3' CCTGGTGGGAAAGGAGAGGGG 85232
                                            A A__
                    CTTGGTG GAGA AGGGG
```

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GGACCAC CTTT TCCCC
                        C CCTC
                                              A A__
GAM3772 PLUNC 3' CCTGGTGGGAAAGGAGAGGGG 85232
                     CTTGGTG GAGA AGGGG
                     GGACCAC CTTT TCCCC
                        C CCTC
GAM3772 PRDM10 3' CACTTGGTAAGAACAAGG 85233
                                               Α
                     CACTTGGTGAGAG AAGG
                     GTGAACCATTCTT TTCC
                          G
GAM3772 PSMF1 5' CTGGAGGAAAGAAGGGGG 85234
                                           Т
                                                Α
                     TTGG GAGAGAA GGGG
                     GACC CTTTCTT CCCC
                       TC
                           C
            3' CACTAGGTGAGAATTGGG 85235
GAM3772 PV1
                                        Т
                                             AAA
                     CACT GGTGAGAG GGG
                     GTGA CCACTCTT CCC
                       Т
                           AA
GAM3772 REM
             5' CCTTCTGAAAGAAGGGGG 85236
                                         GG
                                               Α
                     CTT TGAGAGAA GGGG
                     GGA ACTITCTT CCCC
                      AG
GAM3772 RHO6
             3' CACTCTGCAAGAGAGGGGG 85237
                                            GTG A
                     CACTT G AGAGAA GGGG
                     GTGAG C TCTCTT CCCC
                       A GT
                             С
GAM3772 SARM
             3' ACTGGTGAGGAAGGGG
                                        T A A
                                   85238
                     ACT GGTGAG GAA GGGG
                     111 111111 111 1111
                     TGA CCACTC CTT CCCC
GAM3772 SLC26A8 3' CTCTTTGGAGAAAGGGG
                                    85239
                                          GG A
                     CTT TG GAGAAAGGGG
                     GAG AC CTCTTTCCCC
                      \mathsf{AA} _
GAM3772 SLC26A8 3' CTCTTTGGAGAAAGGGG 85239
                                          GG A
                     CTT TG GAGAAAGGGG
                     GAG AC CTCTTTCCCC
                      AA _
GAM3772 SLC2A13 3' TTGAATAAAAGAAAGGGG 85240
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TTGG TGAGAGAAAGGGG

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AACT ATTTTCTTTCCCC
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GAM3772 SMT3H2 3' CACTAATGGAGAAAGGGG 85241 T A

CACT GGTG GAGAAAGGGG

GTGA TTAC CTCTTTCCCC

GAM3772 SPAG4L 5' CTGGTGAGGAGGAAGGGG 85242 _ A TTGGTGAG AG AAGGGG

GACCACTC TC TTCCCC

CC

GAM3772 SPIN 3' CTTTTAAAAGAAAGGGG 85243 GG

CTT TGAGAGAAAGGGG

GAA ATTTTCTTTCCCC

Α

GAM3772 LOC129676 5' ACTGGTGAGGACAATGGGG 85244 T A AA_

ACT GGTGAG GA GGGG

TGA CCACTC CT CCCC

_ GTTA

GAM3772 LOC130644 3' CACTGGGAGAAAGGGG 85245 T TGA

CACT GG GAGAAAGGGG

GTGA CC CTCTTTCCCC

GAM3772 LOC142941 5' ACTTGATGGGAGGGGG 85246 A AAA

ACTTGGTG GAG GGGG

TGAACTAC CTC CCCC

C _

GAM3772 LOC143903 5' CACTCGGCCAGCCAGAGAGGGG 85247 G A

CACTTGGT AG AGA AGGGG

GTGAGCCG TC TCT TCCCC

G GG C

GAM3772 LOC145622 5' CTCCATGTGGAGAAAGGGG 85248 G A_

CTT GTG GAGAAAGGGG

GAG TAC CTCTTTCCCC

G AC

GAM3772 LOC145757 3' CACTTCAAGGAAAGGGG 85249 GG A

CACTT TGAG GAAAGGGG

GTGAA GTTC CTTTCCCC

GAM3772 LOC146237 3' TAGCAGAAGGAGAAAGGGG 71918 _ _ _ TGGT GA GAGAAAGGGG

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T TC
GAM3772 LOC147917 3' CACTGGGAGAAAGGAGGGG 85250 T T A
                     CACT GG GAGAGA AGGGG
                     GTGA CC CTCTTT TCCCC
                           CC
GAM3772 LOC148114 5' CACTTGGCTGAGGCTAAGGG 85251
                                               AGA
                     CACTTGG TGAG AAGGG
                     GTGAACC ACTC TTCCC
                        G CGA
GAM3772 LOC148645 3' CTGATGAAGAGGGGAGGGG 85252
                                              AA
                     TTGGTGA GAG AGGGG
                     GACTACT CTC TCCCC
                        T CC
GAM3772 LOC149448 3' TGGTGGGAGGGGGGCC 85253
                                             A AA
                                                  111
                     TGGTG GAG AGGGG CC
                     ACCAC CTC TCCCC GG
                       C CC III
GAM3772 LOC149711 3' TGTGTGCAGAGAAAGGGG 85254
                     TG GTG AGAGAAAGGGG
                     AC CAC TCTCTTTCCCC
                      A G
GAM3772 LOC150848 5' ACCTGCAAGGAAAGGGG
                                           GTG A
                                    85255
                     ACTT G AG GAAAGGGG
                     TGGA C TC CTTTCCCC
                      _ GT _
GAM3772 LOC151623 5' CTTGGTGAGAACTGAGGGG 85256
                                               AA
                     CTTGGTGAGAG AGGGG
                     GAACCACTCTT TCCCC
                         GAC
GAM3772 LOC152580 3' CACTTGGTGAGTGATGG
                                              A AA
                                    85257
                     CACTTGGTGAG GA GG
                     GTGAACCACTC CT CC
                         A A_
GAM3772 LOC152715 5' TTGGTGAGAATCACAGGGG 85258
                                               AA__
                     TTGGTGAGAG AGGGG
                     AACCACTCTT TCCCC
                         AGTG
GAM3772 LOC153338 5' TGCTTGAGAAAAGGAGGGG 85259
                                           G_{-}
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TG TGAGAGAA AGGGG

ATCG CT CTCTTTCCCC

```
GA
                           CC
GAM3772 LOC154215 3' CCTGGGAGAAAGGGG 85260
                                           TGA
                     CTTGG GAGAAAGGGG
                     GGACC CTCTTTCCCC
GAM3772 LOC154547 3' CACTAATGGAGAAAGGGG 85241
                                            T A
                     CACT GGTG GAGAAAGGGG
                     1111 1111 1111111111
                     GTGA TTAC CTCTTTCCCC
GAM3772 LOC157247 5' CACTTGAGTGGAAAGGAGGGG 85261
                                               _ A A
                     CACTTG GTG GAGA AGGGG
                     GTGAAC CAC CTTT TCCCC
                       T CC
GAM3772 LOC158997 3' CACTAATGGAGAAAGGGG 85241
                                          ТА
                     CACT GGTG GAGAAAGGGG
                     GTGA TTAC CTCTTTCCCC
GAM3772 LOC163682 3' CACTGGTGAGACCACAGGG 85262
                                             Т
                                                GAA
                     CACT GGTGAGA AGGG
                     GTGA CCACTCT TCCC
                          GGTG
GAM3772 LOC166341 3' CATTCGGCAAGGAAAGGGG 85263 C TG A
                     CATTGG AG GAAAGGGG
                     GT AGCC TC CTTTCCCC
                      A GT _
GAM3772 LOC199678 3' CACATGGAAATAAAAGGGG 85264 T T A
                     CAC TGG GAG GAAAGGGG
                     GTG ACC TTT TTTTCCCC
                      T _ A
GAM3772 LOC199906 5' CACTGTCCCAGAGAAAGGGG 85265
                                             TGGTG
                     CACT AGAGAAAGGGG
                     GTGA TCTCTTTCCCC
                       CAGGG
GAM3772 LOC201669 5' CTTAGTGAGAACCCAAGG 85266
                                              AΑ
                     CTTGGTGAGAG AGGG
                     GAATCACTCTT TTCC
                         GGG
GAM3772 LOC201799 3' ACCTAAAGAGAGAAAGGGG 85267
                                             Т
```

ACTTGG GAGAGAAAGGGG

AC ACTCTTTT TCCCC

```
TGGATT CTCTCTTTCCCC
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GAM3772 LOC221561 3' CACTAATGGAGAAAGGGG 85241 T A CACT GGTG GAGAAAGGGG GTGA TTAC CTCTTTCCCC GAM3772 LOC221962 3' CTTGGTGAGAACTGAGGGG 85256

AA CTTGGTGAGAG AGGGG

GAACCACTCTT TCCCC

GAC

GAM3772 LOC253289 3' CTTGGGAGAAAGGGG 85268 **TGA**

CTTGG GAGAAAGGGG

GAACC CTCTTTCCCC

GAM3772 LOC253782 3' ACTACAGCAAGAGAAAGGGG 85269 TG

ACT TGG AGAGAAAGGGG

TGA GTC TCTCTTTCCCC

T GT

GAM3772 LOC253943 3' TTGGTGAAGAGTATAAGGG 85270

TTGGTGA GAG AAGGG

AACCACT CTC TTCCC

T ATA

GAM3772 LOC255461 5' CTTGGTGAGAACTGAGGGG 85256 AA

CTTGGTGAGAG AGGGG

GAACCACTCTT TCCCC

GAC

GAM3772 LOC255516 5' CTTGGTGAGAACTGAGGGG 85256 AA

CTTGGTGAGAG AGGGG

GAACCACTCTT TCCCC

GAC

GAM3772 LOC256273 3' ACATAGCCAAGAAAGGGG 85271 T GA

AC TGGT GAGAAAGGGG

TG ATCG TTCTTTCCCC

T G

GAM3772 LOC256306 5' CTTGGAGAATGAGGAAGGGG 85272 T __ A

CTTGG GA GAG AAGGGG

GAACC CT CTC TTCCCC

T TA C

GAM3772 LOC257591 3' CACTAATGGAGAAAGGGG 85241

CACT GGTG GAGAAAGGGG

GTGA TTAC CTCTTTCCCC

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GAM3772 LOC51093 3' TGGAAGGAGAAAGGGG 85273 T_
                    TGG GAGAGAAAGGGG
                    ACC CTCTCTTTCCCC
                     TTC
GAM3772 LOC57086 3' CACTTGGACACAGGAAGGGG 85274 TGAG A
                    CACTTGG AG AAGGGG
                    GTGAACC TC TTCCCC
                       TGTG C
GAM3772 LOC58525 5' CAGTTGGTGAGTGGCCCAGGGG 85275 C
                                               AGAA
                    CA TTGGTGAG AGGGG
                    GT AACCACTC
                                TCCCC
                     С
                         ACCGGG
GAM3772 LOC90317 3' CACATGGTGAGAATGAGGG 85276 T
                                              AA
                    CAC TGGTGAGAG AGGG
                    GTG ACCACTCTT TCCC
                     Т
                         AC
GAM3772 LOC90538 3' CACCTGGTAGAAGGG 85277
                                        G GAA
                    CACTTGGT AGA AGGG
                    GTGGACCA TCT TCCC
GAM3772 LOC91397 5' CATTTGGCAAGAGGAAGGGG 85278 C TG A
                    CA TTGG AGAG AAGGGG
                    GT AACC TCTC TTCCCC
                     A GT C
GAM3772 LOC91445 3' CACTGGGATTTGAAAGGGG 85279
                                          TTGA
                    CACT GG GA GAAAGGGG
                    GTGA CC CT CTTTCCCC
                      _ _ AAA
GAM3773 CALB1 5' TGTGTCCGCGCGAAGGG 85282
                                         A _ CCAC
                    TGTGTCCG GC AAG GG
                    ACACAGGC CG TTC CC
                       G C
GAM3773 CBFA2T3 3' TGTGTCCGGCAGGCCAGGG 85283
                                            A A C
                    TGTGTCCG GCA GCCA GG
                    ACACAGGC CGT CGGT CC
                       ^{-} C C
GAM3773 CDC34 3' TGTCGTCTAAGGAGCCACGG 85284 _ CG CA
                    TGT GTC AG AGCCACGG
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```
G AT C_
GAM3773 ENG
            5' TGTGTCCAGTGGCAGGGCTGCG 85285
                                           A__ A_ CA
        G
                     TGTGTCCG GCA GC CGG
                    ACACAGGT CGT CG GCC
                       CAC CC AC
GAM3773 HSF4
            5' TGTGTCCAGGACCGAGCGG 85286
                                          G CAA A_
                    TGTGTCC AG GCC CGG
                    ACACAGG TC TGG GCC
                       C CTC
GAM3773 JAG2
            3' TGCGTCAACAGCCACGG 85287
                                        CG A
                    TGTGTC AGCA GCCACGG
                    ACGCAG TTGT CGGTGCC
                                           G A C
GAM3773 LOH11CR2A 5' TGTGTCCAGCAGCCAGGG 85288
                    TGTGTCC AGCA GCCA GG
                    ACACAGG TCGT CGGT CC
GAM3773 MUC3B 3' TGTGTCCGGGGCAGGGCGGA 85289
                                            A A CCA
                    TGTGTCCG GCAG CGGA
                    ACACAGGC CGT C GCCT
                       CC _ CC_
GAM3773 NKX2E 5' TGTGTCCGGGCAGCAGG 85290
                                          A A CAC
                    TGTGTCCG GCA GC GG
                    ACACAGGC CGT CG CC
                       C _ T__
            3' TGTGTTCAAGCAAAGAATGG 85291
                                        С
                                             CCAC
GAM3773 PAM
                    TGTGT CGAGCAAG GG
                    ACACA GTTCGTTT CC
                      Α
                          CTTA
GAM3773 PAM
            3' TGTGTTCAAGCAAAGAATGG 85291
                                         С
                                             CCAC
                    TGTGT CGAGCAAG GG
                    ACACA GTTCGTTT CC
                          CTTA
                      Α
GAM3773 PAM
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                                         С
                                             CCAC
                    TGTGT CGAGCAAG GG
                    ACACA GTTCGTTT CC
                      Α
                          CTTA
GAM3773 PINX1 3' TGTGTCTGAGAGCCACGA 85292
                                         C CA
```

TGTGTC GAG AGCCACGG

ACA CAG TC TCGGTGCC

```
ACACAG CTC TCGGTGCT
GAM3773 SAG 5' TGTTCTGAGCAAGCTGG 85293 G C
                                           CAC
                    TGT TC GAGCAAGC GG
                    ACA AG CTCGTTCG CC
                     _ A
                         Α
GAM3773 UCP2 5' TGTGTCCGAGCCGCAGG 85294
                                         AA CAC
                    TGTGTCCGAGC GC GG
                    ACACAGGCTCG CG CC
                        G T
GAM3773 AP1G2 5' TGCGTCCGCACCCCACGG 85295
                                         GA AG
                    TGTGTCC GCA CCACGG
                    ACGCAGG CGT GGTGCC
                       GG
GAM3773 AP3D1 3' TGTGCCCACGCTGGCCGTGG 85296
                                         A AA AC
                    TGTGTCCG GC GCC GG
                    ACACGGGT CG CGG CC
                       G AC CA
GAM3773 BSPECV 3' TGGGTTGAAGCAGCCACGG 85297 T CC A
                    TG GT GAGCA GCCACGG
                    AC CA TTCGT CGGTGCC
                    C AC
                                           CCGA_ A C
GAM3773 FLJ21934 3' TGTGTTTGGGCGCACACCAGGA 85298
                    TGTGT GCA GCCA GGA
                    ACACA CGT TGGT CCT
                      AACCCG G
                                           C CCAC
GAM3773 FLJ30681 3' TGTGTCCAGTGAGAAAGTGGA 85299
                    TGTGTCC GAG AAG GGA
                    ACACAGG CTC TTC CCT
                      TCA T A___
GAM3773 GIT2
           3' TGTGTCCGGGGAAGCCAGG 85300
                                         AGC C
                    TGTGTCCG AAGCCA GG
                    ACACAGGC TTCGGT CC
                       CCC
GAM3773 GIT2
           3' TGTGTCCGGGGAAGCCAGG 85300
                                         AGC C
                    TGTGTCCG AAGCCA GG
                    ACACAGGC TTCGGT CC
                       CCC
GAM3773 GIT2 3' TGTGTCCGGGGAAGCCAGG 85300
                                         AGC
                                              C
```

TGTGTCCG AAGCCA GG

```
ACACAGGC TTCGGT CC
                       CCC
GAM3773 GTPBP5 3' TCCGTAGCAAGCCATGGA 85301 _ C
                    TCCG AGCAAGCCA GGA
                    AGGC TCGTTCGGT CCT
                         Α
GAM3773 HSPC072 5' TGTGTCCACAATACGG 85302
                                        GA GCC
                    TGTGTCC GCAA ACGG
                    ACACAGG TGTT TGCC
                       Α
GAM3773 IL-17RC 3' GTGAAACCAAGCCACGG 85303 TCC G
                    GTG GA CAAGCCACGG
                    CAC TT GTTCGGTGCC
                     T G
GAM3773 KIAA0252 5' TGTGTCCGAGTCGATCACGA 85304
                                          CAAGC
                    TGTGTCCGAG CACGG
                    ACACAGGCTC GTGCT
                        AGCTA
GAM3773 KIAA1145 3' TGTGTCCGAAGTGGTGCTTGGA 85305
                                             CAA CAC
                    TGTGTCCGAG GC GGA
                    ACACAGGCTT CG CCT
                        CACCA AA
GAM3773 KIAA1922 5' TGTGTCCGACAGGACGGA 85306
                                          G AGCC
                    TGTGTCCGA CA ACGGA
                    ACACAGGCT GT TGCCT
                       _ CC__
GAM3773 MGC35558 3' TGTCTCCGAGCAAAACGA 85307 G
                                              CC
                    TGT TCCGAGCAAG ACGG
                    ACA AGGCTCGTTT TGCT
                     G
GAM3773 RNF8 3' TATGTCCAGCAGCTGTGG 85308
                                         G A CAC
                    TGTGTCC AGCA GC GG
                    ATACAGG TCGT CG CC
                       _ _ ACA
GAM3773 LOC144519 3' TGAGTTCCCAGGCCACGGA 85309 TG_ G CAA
                    TG TCC AG GCCACGGA
                    AC AGG TC CGGTGCCT
                    TCA G __
GAM3773 LOC147353 3' TGTGTCCAGTAATCAGGA 85310
                                          G C GC C
                    TGTGTCC AG AA CA GGA
```

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_ A A_ _
GAM3773 LOC148114 5' TGTGCCCGGCACCTGCGG 85311 A AA A
                    TGTGTCCG GC GCC CGG
                    ACACGGGC CG TGG GCC
                       _ __ AC
GAM3773 LOC164397 3' TGAGTCCGAGCAGCAGGA 85312 T A CAC
                    TG GTCCGAGCA GC GGA
                    AC CAGGCTCGT CG CCT
                     Т
                        Т
GAM3773 LOC165476 5' GTGTCCACAGCCAGGCCGCGG 85313
                                             _ AA_ A
                    GTGTCCG AGC GCC CGG
                    CACAGGT TCG CGG GCC
                       G GTC C
GAM3773 LOC199958 3' TGGTCCACAGCAAGCCACGGA 85314 T _
                    TG GTCCG AGCAAGCCACGGA
                    AC CAGGT TCGTTCGGTGCCT
                     _ G
GAM3773 LOC201617 5' TGTGTCCGACACACTGGA 85315
                                            G AGC
                    TGTGTCCGA CA CAC GGA
                    ACACAGGCT GT GTG CCT
                        _ ___ A
GAM3773 LOC253767 3' TGTGTCCAGGACCGAGCGG 85286
                                            G CAA A
                    TGTGTCC AG GCC CGG
                    ACACAGG TC TGG GCC
                       _ C__ CTC
GAM3773 LOC254707 5' TGTGCCCGGGCACCCCGGA 85316 A AG A
                    TGTGTCCG GCA CC CGGA
                    ACACGGGC CGT GG GCCT
                       C G_ _
GAM3773 LOC64744 3' TGGTCCTCCAGCCACGGA 85317 T GAGCA
                    TG GTCC AGCCACGGA
                    AC CAGG TCGGTGCCT
                     _ AGG__
GAM3773 LOC89231 5' TGTGTCCACATCACACGG 85318
                                           AG_ AGC
                    TGTGTCCG CA CACGG
                    ACACAGGT GT GTGCC
                       GTA _
GAM3774 TAZ
           3' AAAATGAAAATAGAATATTT 85321
                                          Α
```

AGAATGAAAATA AATATTT

ACACAGG TC TT GT CCT

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TTTTACTTTTAT TTATAAA
                          C
GAM3774 ZNF216 3' TTTAAGAATAAAAGTAAAA 85322
                                              Α
                     TTTAAGAATGAAA TAAAA
                     AAATTCTTATTTT ATTTT
                          C
GAM3774 PORIMIN 3' TCTAAGAATTTATTCTAAAATA 85323
                                              GAAAA
         TTT
                      TTTAAGAAT
                                 TAAAATATTT
                     AGATTCTTA ATTTTATAAA
                         AATAAG
GAM3774 RGS20
             3' AAGAATGAAAATGCCCATATTT 85324
                                               AAA
                     AAGAATGAAAAT ATATTT
                     TTCTTACTTTTA TATAAA
                          CGGG
GAM3774 TRAF3 5' TTTAAAAATGAAAATGAAAAC 85325
                     TTTAAGAATGAAAAT AAAAT
                     AAATTTTTACTTTTA TTTTG
                           С
GAM3774 TRAF3 3' TTTAAAAATGAAAATGAAAAC 85325
                     TTTAAGAATGAAAAT AAAAT
                     AAATTTTTACTTTTA TTTTG
GAM3774 LOC145098 5' TTTAGAAATGAAAATAAAA 85326
                                            AG
                     TTTA AATGAAAATAAAA
                     AAAT TTACTTTTATTTT
                       CT
                                              AATTA ___
GAM3775 E2F1
            3' CACACATTCACCCCGGTACAC 85329
                     CACACGTTCG CCG ACAC
                     GTGTGTAAGT GGC TGTG
                         GGG__ CA
GAM3775 TACSTD1 3' CACACATTTGAATGTTACACA 85330
                                              C TACCG
                     CACACGTT GAAT ACACA
                     GTGTGTAA CTTA TGTGT
                        A CAA
GAM3775 DKFZp547I014 5' ACATGTTTGAATTACCTCAC 85331 C C
                                                     GA
                     ACA GTT GAATTACC CAC
```

A A

11 1111111111 111 11

GAM3775 KIAA0444 3' CAGGTTCGAATCTTCCATAC 85332

TGT CAA CTTAATGG GTG

 A_{-}

CA GTTCGAATT CCG AC

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GT CAAGCTTAG GGT TG
                          AA A
                      C
GAM3775 KIAA1000 3' ACATGTTCAAATTGCCTAAC 85333
                                           С
                                               Α _
                     ACA GTTCGAATT CC GAC
                     TGT CAAGTTTAA GG TTG
                      Α
                          CA
GAM3775 LOC157869 3' TTCCATAACCGACACAC
                                   85334
                                          GA T
                     TTC AT ACCGACACAC
                     AAG TA TGGCTGTGTG
                      G T
GAM3776 FBXL7 3' TCGGTGCTTACATACGCTGCTT 85337
                                             CGTA CTT
                     TCGGTGC AC CGCTGCTT
                     AGCCACG TG GCGACGAA
                        AA TAT
GAM3776 LOC153579 3' TCGGTGCCTGACCGCCGCT 85338
                                              GTAACCT
                     TCGGTGCC
                                TCGCTGCT
                     AGCCACGG
                                GGCGGCGA
                        ACT
GAM3776 LOC254659 5' TCGGTCTCGCTCGCTGCT 85339
                                            GC AACCT
                     TCGGT CGT TCGCTGCT
                     AGCCA GCG AGCGACGA
                       GA
GAM3777 FOXI1 3' CTTAACCTCCTTGAGC
                                 85342
                                         TTTA
                     CTTAACC TCTTTGAGC
                     GAATTGG AGGAACTCG
GAM3777 MAB21L1 5' TCCCTTCCTTTTATCTTTGAGC 85343
                                            AΑ
        С
                      TCTT CCTTT ATCTTTGAGCC
                     AGGG GGAAA TAGAAACTCGG
                      AA A
GAM3777 EFA6R 3' TATCTTAGCCTTGGAAAGC 85344
                                           A TATCTTT
                     TATCTTA CCTT
                                  GAGC
                     IIII
                     ATAGAAT GGAA
                                   TTCG
                        C CCT
GAM3777 FLJ11722 3' CTTAACCTTTCTGAGC
                                  85345
                                           TATC
```

GAM3777 HSA011916 3' CTTGGCTTCTCTTTGAGCC 85346 AAC A
CTT CTTT TCTTTGAGCC

11111111 1111111

CTTAACCTT TTTGAGC

GAATTGGAA AGACTCG

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GAA GAAG AGAAACTCGG
                     CC_ _
GAM3777 HSA011916 3' CTTGGCTTCTCTTTGAGCC 85346 AAC A
                    CTT CTTT TCTTTGAGCC
                    GAA GAAG AGAAACTCGG
                     CC_ _
GAM3777 KIAA1033 3' TCTTAACCTTTGAAAGTAGAGC 85347
                                           ATCTTT
        C
                     TCTTAACCTTT GAGCC
                    AGAATTGGAAA
                                 CTCGG
                        CTTTCAT
GAM3777 KIAA1257 3' CTTAACCTCTTTGAG 85348
                                        TTTA
                    CTTAACC TCTTTGAG
                    GAATTGG AGAAACTC
GAM3777 KIAA1946 3' TATCCTGAAGGTATTTTTGAGC 85349 AACCTT C
        C
                     TATCTT TAT TTTGAGCC
                    ATAGGA ATA AAACTCGG
                       CTTCC_ A
GAM3777 PRO0899 5' CTTAACCTTTCTGAGC
                                          TATC
                                 85345
                    CTTAACCTT TTTGAGC
                    GAATTGGAA AGACTCG
                                          CC A _
GAM3777 PXR2b 3' TCTTAATTCTTCTTTTGAGCC 85350
                    TCTTAA TTT TCTTT GAGCC
                    AGAATT AAG AGAAA CTCGG
                       A A
GAM3777 LOC138255 5' TATCATAACCTTTGGGAAAAGC 85351 T ATCTTT
                    TATC TAACCTTT GAGC
                    ATAG ATTGGAAA TTCG
                      Т
                          CCCTT
GAM3777 LOC145453 3' TATCTTTGTTTTTCATGAGCC 85352
                                          AACC A TT
                    TATCTT TTT TC TGAGCC
                    ATAGAA AAA AG ACTCGG
                       AC__ A T_
GAM3777 LOC202025 5' TATCTTCAGTTTAACCCTTTGA 85353
                                            AACCTTTA
                     TATCTT TCTTTGAGC
        GC
                    GGAAACTCG
                    ATAGAA
                       GTCAAATTG
GAM3778 AVPR2 3' AAGCTCTCCTCATACAGCTG 85356
                                        AATG
                    AAG TTTCATACA CTG
```

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GAGA
                             C
GAM3778 COIL 3' AAAAATGTGTACAGCTGAAG 85357
                                         TTCA A
                    AAGAATGT TACA CTGAAG
                    TTTTTACA ATGT GACTTC
                        C___ C
            3' AAATGTTTCAGGCCTGGAG 85358
GAM3778 DVL3
                                           TACAA A
                    GAATGTTTCA CTG AG
                     TTTACAAAGT GAC TC
                        CCG__ C
GAM3778 GPC4
             3' AGAATTACTCTTACAACTGAAG 85359
                                           GT A
        Α
                     AGAAT TTC TACAACTGAAGA
                     TCTTA GAG ATGTTGACTTCT
                       AT A
GAM3778 ITK 3' AAGAATGTACACATGTACAGTT 85360
                                           TT_ _ AC A
        GAGGA
                        AAGAATGT CA TACA TGA GA
                    TTCTTACA GT ATGT ACT CT
                        TGT AC CA C
GAM3778 P23
            3' GAATGTTTCATTCTGA
                               85361
                                         ACAA
                    GAATGTTTCAT CTGA
                     CTTACAAAGTA GACT
GAM3778 PCSK2 3' AAGAGGCTCCATACAACTGGAG 85362
                                            AΤ
                                                   Α
        Α
                     AAGA GTTTCATACAACTG AGA
                     TTCT CGAGGTATGTTGAC TCT
                      \mathsf{C}_{-}
                             С
GAM3778 PPARGC1 3' GAATTTTCATACAATGA 85363
                                         G
                                              С
                    GAAT TTTCATACAA TGA
                     CTTA AAAGTATGTT ACT
            3' GAATGCTTCAGTCACTGGAGA 85364
                                            TACA A
GAM3778 REQ
                     GAATGTTTCA ACTG AGA
                     CTTACGAAGT TGAC TCT
                        CAG_ C
GAM3778 TRPS1 3' AAATGTTTCATATGAAA
                                 85365
                                           CAAC
                    GAATGTTTCATA TGAAG
                     TTTACAAAGTAT ACTTT
                                                _ ACT
GAM3778 TYRP1 3' AAGATTGTTTCATAGCACAAGA 85366
                                           Α
```

AAGA TGTTTCATA CA GA

TTC GGAGTATGT GAC

```
C GTT
                                85367 TT ACA
GAM3778 UBB 3' GAATGCCATGACTGAAG
                    GAATGT CAT ACTGAAG
                    CTTACG GTA TGACTTC
                      __ C__
           3' AAGGGTGTCAGAGGATACAACT 85368 AA TC___
GAM3778 XK
                       AAG TGTT ATACAACTG AGA
        GGAGA
                    TTC ACAG TATGTTGAC TCT
                     CC TCTCC
                                С
GAM3778 BET3
            3' AAGAATGTGTCTTTATTGAAGA 85369
                                          T ATACAAC
                    AAGAATGT TC
                               TGAAGA
                    TTCTTACA AG
                                ACTTCT
                       C AAATA
GAM3778 C20orf150 3' AAAAATGGGACATAACTGAAG 85370 TTT CA
                    AAGAATG CATA ACTGAAG
                    TTTTTAC GTAT TGACTTC
                       CCT _
GAM3778 ESPL1 3' GGAAATGTTTCATATAAAACAC 85371 A
                                              CA
        TG
                     A GAATGTTTCATA ACTG
                    C TTTACAAAGTAT
                                  TGAC
                    С
                          ATTTTG
GAM3778 FER1L4 3' AGACTGTTTCATAAAAAAAAA 85372 A
                                             CAACT
                    AGA TGTTTCATA GAAGA
                    TCT ACAAAGTAT TTTCT
                     G
                         TTT
GAM3778 FLJ10853 3' AGAGTGTTGAAACTGAAG 85373 A TCATAC
                    AGA TGTT AACTGAAG
                    TCT ACAA TTGACTTC
                     C CT
GAM3778 FLJ11016 3' AGATGTTTCATATGCACTCGAG 85374 A CA_ GA
                     AGA TGTTTCATA ACT AGA
                    TCT ACAAAGTAT TGA TCT
                         ACG GC
GAM3778 FLJ12934 3' AAGAGAGTTTACAACTGAAGA 85375 AT TCA
                    AAGA GTT TACAACTGAAGA
                    TTCT CAA ATGTTGACTTCT
                     CT
GAM3778 GIOT-2 3' AAGACTGCAGATAACTGAAG 85376
                                         A TTCATAC
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AAGA TGT AACTGAAG

TTCT ACAAAGTAT GT CT

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TTCT ACG
                              TTGACTTC
                      G TCTA
GAM3778 GPX5 3' GAGTGCTTCAAGAAACTGAAGA 85377 A
                                              TAC
                     GA TGTTTCA AACTGAAGA
                     CT ACGAAGT TTGACTTCT
                      C
                         TCT
GAM3778 KIAA0321 5' AAGGGTGCTGCAGTAACTGAAG 85378 AA T TAC
                     AAG TGTT CA AACTGAAGA
                     TTC ACGA GT TTGACTTCT
                      CC C CA
GAM3778 KIAA1354 3' AAGAAGATACAACTGAAG 85379
                                          TGTTTC
                     AAGAA ATACAACTGAAG
                     TTCTT TATGTTGACTTC
                       С
GAM3778 MGC26778 3' GAATGTTTCCCTCTGAAG 85380
                                             ATACAA
                     GAATGTTTC CTGAAG
                     CTTACAAAG GACTTC
                        GGA
GAM3778 LOC122773 3' AATGGAGACAACTGAAGA 85381
                                            TTTCAT
                     AATG
                          ACAACTGAAGA
                     TTAC TGTTGACTTCT
                      CTCTC
GAM3778 LOC148823 3' GAATGTTTCATGCACTG 85382
                                             ACA
                     GAATGTTTCAT ACTG
                     CTTACAAAGTA TGAC
                         CG
GAM3778 LOC149132 5' AGAATGTTCAGGGCCTGGAGA 85383
                                              T TACAA A
                     AGAATGTT CA CTG AGA
                     TCTTACAA GT GAC TCT
                        _ CCCG_ C
GAM3778 LOC203292 3' GAATGTTTCATTCTGA
                                            ACAA
                                  85361
                     GAATGTTTCAT CTGA
                     11111111111 1111
                     CTTACAAAGTA GACT
                         Α
GAM3778 LOC221876 5' AGAATGTTTCATTGTTACTGA 85384
                                               ACA
                     AGAATGTTTCAT ACTGA
                     TCTTACAAAGTA TGACT
                         ACAA
GAM3778 LOC90499 3' GAATGTTTCATTCTGA
                                  85361
                                            ACAA
                     GAATGTTTCAT CTGA
```

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CTTACAAAGTA GACT
                        Α
GAM3779 ANKH 3' CTGACAGCCACAGCCCATGTA 85387
                                          CAA C
                    CTGAC CCAT GTTCA GTA
                    GACTG GGTG CGGGT CAT
                      TC T A
GAM3779 ARNT2 3' GAACTGACCTACCCATGT 74242
                                          AA
                    GAACTGACC CCATGT
                    CTTGACTGG GGTACA
                       ATG
GAM3779 MIP
           3' CTGGCTAAACCCCTCCACGTA 85388
                                        ACC ATG
                    CTG AACC TTCACGTA
                    GAC TTGG AGGTGCAT
                     CGAT GG
GAM3779 C20orf21 3' GAGCTGACCAAGCACACGT 85389 A CCAT T
                    GA CTGACCAA GT CACGT
                    CT GACTGGTT CG GTGCA
                     С
                        ____ T
GAM3779 FLJ21817 3' GACTGACCAATCACAACACGT 85390 A C TT
                    GA CTGACCAA CATG CACGT
                    CT GACTGGTT GTGT GTGCA
                        А Т
GAM3779 FLJ22671 5' GAGCTGGCCACCATGCC 74248 A A A
                    GA CTG CCA CCATGTT
                    CT GAC GGT GGTACGG
                     СС
GAM3779 HIC2 3' GAACTGACGGCCATCCCCGCGT 85391
                                         CAA G A
        Α
                    GAACTGAC CCAT TTC CGTA
                    CTTGACTG GGTA GGG GCAT
                       CC_ G C
GAM3779 KIAA0826 3' CTGACTGCATGTTCATGT 85392
                                        CAAC
                                               С
                    CTGAC CATGTTCA GT
                    GACTG GTACAAGT CA
                      AC__
                           Α
GAM3779 LOC253461 3' GAACTGCCATCATGTTCACGTA 85393
                                            A AC
                    GAACTG CCA CATGTTCACGTA
                    CTTGAC GGT GTACAAGTGCAT
```

_ A_

GAACTGAC TGTT CACGT

GAM3779 LOC91263 5' GAACTGACTGCTTGCTTGGCAC 85394

GT

CAACCA _

| GAM3780 RFX2 3' TCCGTT | CTTGACTG ACGA GTGCA ACGA_ ACC | AA |
|---------------------------|--|-------|
| GAINIS760 RFX2 3 TOGGTT | TCC ATTGT AGCTTCA AGG TGACA TCGAAGT | AA |
| GAM3780 KIAA1085 3' TCCAT | CAAT C_ TTGCTAAAGCCTCA 85398 TCCATTGT AAAGCTTCA AGGTAACG TTTCGGAGT | _ |
| GAM3780 KIAA1157 3' TCCAC | A CTGCTTAAGGCTTCA 85399 TCCATTGT AA GCTTCA AGGTGACG TT CGAAGT | A |
| GAM3780 LOC146272 5' CCCA | AA C ATTGTGTCCCAGCTTCA 85400 TCCATTGT AGCTTCA GGGTAACA TCGAAGT | AA |
| GAM3780 LOC149460 3' CCAT | CAGGG TTGCACTATAGCTTCA 85401 CCATTGTA AGCTTCA GGTAACGT TCGAAGT | A |
| GAM3781 GCNT2 5' TCGAT | GATA TCCGTTTCATCCCGAGA 85404 TCGATTCCGT CC AGA AGCTAAGGCA GG TCT | A |
| GAM3781 BLP1 3' TCATTC | AAGTAG C CGTCTGCAAGGTAA 85405 G TC ATTCCGTC CAAG TGA AG TAAGGCAG GTTC ATT | A |
| GAM3781 BLP1 3' TCATTC | _ AC C CGTCTGCAAGGTAA 85405 G TC ATTCCGTC CAAG TGA AG TAAGGCAG GTTC ATT | A |
| GAM3781 LOC143914 5' TCGA | _ AC C ATTCCGTTTGAGTGA 85406 TCGATTCCGT AG TGA AGCTAAGGCA TC ACT | CCA A |
| GAM3781 LOC253891 5' CCGA | AAC _ | АА |

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GGCTAAGGCAGG TC AC
                        G _
GAM3782 STAM 3' CTATAATTGCACCAAAAATTTA 85410
                                        CGGAT
        G
                    CTAT TACCAAAAATTTAG
                    GATA GTGGTTTTTAAATC
                     TTAAC
GAM3783 AOC2
            3' GCCTAACCACGCCGCCCG 85413
                                        CT
                    GCCTA CGCGCCGCCCG
                    11111 111111111111
                    CGGAT GTGCGGCGGCC
                     TG
GAM3783 ARRB2 5' CGCGCGCCCGCCCCC
                                85414 _
                                         TACTCG
                    CG GCGCC
                            CGCCGCCC
                    GC CGCGG
                            GCGGCGGG
                    G
GAM3783 BRF1 5' CGGAGCAGCCCGCGCCCCG 85416 C CTA
                   CGG GC CTCGCGCCGCCCG
                   GCC CG GGGCGCGGGGC
                     T TC_
GAM3783 BRF1
            5' GCGCCCGGGCCGCCCCG 85415
                                          AC
                    GCGCCT TCGCGCCGCCCG
                    CGCGGG GGCGCGGCGGC
                      CCC
GAM3783 C7orf2 5' CGCCGCCGCGCCCC 85417
                                      TAC
                   CGCC TCGCGCCGCCC
                    GCGG GGCGCGGGG
                     C__
GAM3783 CACNA1A 3' CGCCGCCCCCGCTGCCC 85418 G TA GCC
                   CG CGCC CTCGC GCCC
                    GC GCGG GGGCG CGGG
                    G __ A__
GAM3783 CALM1 5' CGCCGCCTGCGCCGCC
                                85419 G ACTC
                    CG CGCCT GCGCCGCC
                    GC GCGGA CGCGGCGG
                    G
```

C__ G

GAM3783 CDKN2A 5' GCTGCTCCCGCCGCCCG 85421 GC A G

GC CT CTC CGCCGCCCG

|| || || || |||||||||

GCGCC TCGC GCCGCCCG

CGCGG GGCG CGGCGGGC

GAM3783 CDC34 5' GCGCCGCCGCCGCCGCCG 85420

TAC _

```
CG GA GGG GCGGCGGC
                    AC _ _
                                       CTAC _
GAM3783 CHN1 5' GGCGCTCGCCGCCCCG 85422
                   GGCGC TCGC GCCGCCCG
                   CCGCG AGCG CGGCGGGC
                        G
GAM3783 CORO2A 5' GCGCTCCTCGCCGCCCG
                                 85423
                                       CTA GC
                   GCGC CTC GCCGCCCG
                   CGCG GAG CGGCGGCC
                    AG
GAM3783 DSCAM 5' CGCCGCCCGCCGCCGCCG 85424
                                        G TATG
                   CG CGCC C C CGCCGCCCG
                   GC GCGG G G GCGGCGGCC
                    G GC
                                          CG
GAM3783 DTNB
            5' CAGCGCCTACTCAGGCCCC 85425
                   CGGCGCCTACTCG GCC CC
                   GTCGCGGATGAGT CGG GG
                        C _
GAM3783 DTNB
            5' CAGCGCCTACTCAGGCCCC 85425
                                          CG
                   CGGCGCCTACTCG GCC CC
                   GTCGCGGATGAGT CGG GG
GAM3783 DTNB
            5' CAGCGCCTACTCAGGCCCC 85425
                                          CG
                   CGGCGCCTACTCG GCC CC
                   GTCGCGGATGAGT CGG GG
                        С
GAM3783 DVL3
           5' CGGGTCCCAGCGCCCCG 85426
                                       CG CTC
                   CGG CCTA GCGCCGCCCG
                   GCC GGGT CGCGGCGGC
                    CA _
           5' CGGCGCTCACGCCCGCCCG 85427
GAM3783 EN2
                                       CTAC
                   CGGCGC TCGCGCC GCCCG
                   GCCGCG AGTGCGG CGGGC
                                       _ TACTCG
GAM3783 EN2
           5' CGGCCGCCGCCGCCCC 85428
                   CGGC GCC CGCCGCCG
                   GCCG CGG
                            GCGGCGGGC
                    G CG_
GAM3783 EP300 5' CGGGCCGAGCAGCGCCCCG 85429
                                        C TACTC
                   CGG GCC GCGCCCG
```

```
GCC CGG CGCGGCGGCC
                    _ CTCGT
GAM3783 F2R 5' CGGTCCCTCAGCCGCC
                              85430 CG TA C
                   CGG CC CTCG GCCGCC
                   GCC GG GAGT CGGCGG
                    A_ __ _
GAM3783 HAGH 5' AGCGCCACGCCCC
                              85431
                                     TACTC
                   GGCGCC GCGCCGCCC
                   TCGCGG TGCGGCGGG
GAM3783 HCN4 5' GGCGCGCGCGCCCCG 85432
                                       CTACT
                   GGCGC CGCGCCGCCG
                   CCGCG GCGCGGGGC
                     CC
GAM3783 HNF3G 5' CGGCGCCCGCCCGTCC 85433 TACT G C
                   CGGCGCC CGC CCG CC
                   GCCGCGG GCG GGC GG
GAM3783 JAG2 5' CGGCCCGCCGCCGCCGCCG 85434
                                        G TAT
                   CGGC CC C CGC GCCGCCCG
                   GCCG GG G GCG CGGCGGGC
                    _ GC_ G
                                      TAC _
GAM3783 KCNA7 5' CGCCGCCGCCGCCCC 85435
                   CGCC TCGC GCCGCCC
                   GCGG GGCG CGGCGGG
                    C__ G
GAM3783 KCNK1 5' GGCTCCCGCCCGCCCCC 85436 G TA T G
                   GGC CC C CGCCGCCCG
                   CCG GG G G GCGGCGGCC
                    A GC _ _
GAM3783 LASS2 5' CGGCGCCGCCGCCGCCGC 85437
                                        TAC _
                   CGGCGCC TCGC GCCGCCCG
                   GCCGCGG GGCG CGGCGGGC
                     C__ G
GAM3783 LIG1
           5' GGTCCCGCGCGCCGCTGCCCG 85438 CG ACT ____
                   GG CCT CGCGCC GCCCG
                   CC GGG GCGCGG CGGGC
                   A_ C__ CGA
                                       TA _
GAM3783 LMO2 5' CGCCGGCTCCGCGCCCCG 85439
                   CGCC CTC GCGCCGCCCG
```

```
GCGG GAG CGCGGCGGCC
                     CC G
GAM3783 LRP8 5' CGCCGCCGCCGCTGCCGCCCG 85440 G TAC
                    CG CGCC TCGC GCCGCCCG
                    GC GCGG GGCG CGGCGGGC
                     G C A
GAM3783 LRP8
            5' CGCCGCCGCCGCTGCCGCCCG 85440 G TAC
                    CG CGCC TCGC GCCGCCCG
                    GC GCGG GGCG CGGCGGGC
                     G C A
GAM3783 LRP8
            5' CGCCGCCGCCGCTGCCGCCCG 85440 G TAC
                    CG CGCC TCGC GCCGCCCG
                    GC GCGG GGCG CGGCGGGC
                     G C A
GAM3783 MAP3K5 5' CGGCGCCTCCGTGGCCGCGCG 85441
                                             AC
                                                     С
        CTCG
                      CGGCGCCT TCGCGCCGC CG
                    GCCGCGGA GGCGCGGCG GC
                       GGCACC
                                Α
GAM3783 MAPK12 5' CGGGCCGGCTCCGCGCCCCTCG 85442
                                           C TA
                                                    C
                    CGG GCC CTC GCGCCGC CG
                    GCC CGG GAG CGCGGCG GC
                     _ CC G
GAM3783 MYO1D 5' CGGCGCCTTCTCGGCCG 85443
                                          A C
                    CGGCGCCT CTCG GCCG
                    GCCGCGGA GAGC CGGC
                                        A C CC
GAM3783 NAB2 5' CGGCGCCTGCTGCGTGC 85444
                    CGGCGCCT CT GCG GC
                    GCCGCGGA GA CGC CG
                       C _ A_
GAM3783 NFKBIL2 5' GCCTCTTCGCGCCGCTGCCCG 85445
                                          AC
                    GCCT TCGCGCC GCCCG
                    1111 1111111 11111
                    CGGA AGCGCGG CGGGC
                          CGA
                     GA
GAM3783 ODC1
           5' CAGCGCCTGGCTCCCGCCCG 85446
                                           A_ GCG
                    CGGCGCCT CTC CCGCCCG
                    GTCGCGGA GAG GGCGGGC
                       CC
GAM3783 OLFM1 5' CGGCGCCTGGCTCGTGTCCCCA 85447
                                            A_ CG___
        CGCC
                      CGGCGCCT CTCG CCGCCC
```

```
CC ACAGG C
GAM3783 OLFM1 5' CGGCGCCTGGCTCGTGTCCCCA 85447 A_ CG___ _
        CGCC
                     CGGCGCCT CTCG CCGC CC
                   GCCGCGGA GAGC GGTG GG
                      CC ACAGG C
GAM3783 OLFM1 5' CGGCGCCTGGCTCGTGTCCCCA 85447 A_ CG____
        CGCC
                     CGGCGCCT CTCG CCGCCC
                   GCCGCGGA GAGC GGTG GG
                      CC ACAGG C
GAM3783 PCOLCE2 5' CGGCGCTCGGCTGCCC 85448 CTAC C C
                   CGGCGC TCG GC GCCC
                   GCCGCG AGC CG CGGG
                      Α
GAM3783 PITPN 5' CGCCGCTGCCGACGCCGC 85449 G CTA C
                   CG CGC CT GCGCCGCCCG
                   GC GCG GG TGCGGCGGCC
                    G AC_ C
GAM3783 RELN 5' CGCGCGCCCTACGCGCCGCTCG 85450 _ ACT C
                   CG GCGCCT CGCGCCGC CG
                   GC CGCGGG GCGCGGCG GC
                      ΑT
                    G
GAM3783 SDC2 5' GCGCCTGCTCCCGCCGCCCG 85451
                                       A G
                   GCGCCT CTC CGCCGCCCG
                   CGCGGA GAG GCGGCGGGC
                     C G
GAM3783 SGT 5' GCGCACCGCGGTGCCGCCCG 85452
                                       CT T ___
                   GCGC AC CGC GCCGCCCG
                   CGCG TG GCG CGGCGGCC
                    __ _ CCA
GAM3783 SMARCC2 5' CGGGCCCCGCCGCCGCCG 85453
                                         C ACT _
                   CGG GCCT CGC GCCGCCCG
                   GCC CGGG GCG CGGCGGGC
                    _ __ G
GAM3783 SMARCC2 5' CGGGCCCCGCCGCCGCCG 85453
                                         C ACT _
                   CGG GCCT CGC GCCGCCCG
                   GCC CGGG GCG CGGCGGGC
GAM3783 TJP1 5' CGGCGTCTCCTCGGAAGCCG 85454
                                       CAC_
                   CGGCG CT CTCG GCCG
```

GCCGCGGA GAGC GGTG GG

```
A G CTT
GAM3783 TMEM1 5' GCGCCGCAGCTGCCGCCCG 85455 TACTC
                   GCGCC GCGCCCG
                   CGCGG CG CGGCGGGC
                     CGT A
GAM3783 TRIM8 3' CAGCGCCCCGCCCC
                              85456
                                      ACTCG
                   CGGCGCCT CGCCGCC
                   GTCGCGGG GCGGCGG
GAM3783 WEE1 5' CGGCCCGGCGCCCC 85457
                                     G TACTC
                   CGGC CC GCGCCGCCC
                   GCCG GG CGCGGCGGG
                    С
GAM3783 5T4 5' CGGCGCCCGCTCCGAAGGCTCG 85458 TA G CC_ C
                   CGGCGCC CTC CG GC CG
                   GCCGCGG GAG GC CG GC
                     GC _ TTC A
GAM3783 A2BP1 5' CGGCCCCTGGGCTCCG 85459
                                       G ACTC G C
                   CGGC CCT GC CCG CCG
                   GCCG GGA CG GGC GGC
                    G CC_ A A
GAM3783 ABHD3 5' GCTGCCTACTCCCCCTCG 85460 _
                                        GCG G
                   GC GCCTACTC CC CC CG
                   CG CGGATGAG GG GG GC
                        ___ A
                                        T CC
GAM3783 ALTE 5' CGGCGCCTACCGCGTAGACCCG 85461
                   CGGCGCCTAC CGCG GCCCG
                   GCCGCGGATG GCGC TGGGC
                      _ ATC
GAM3783 ALTE 5' CGCCGCTTCCGCGCCCCG 85462 G CTAC
                   CG CGC TCGCGCCGCCG
                   GC GCG GGCGCGGGC
                    G AA
GAM3783 ARHGEF9 5' CGGCGCCTGCTCAGTCTGTCCG 85463 A CGCCGC
                   CGGCGCCT CTCG CCG
                   GCCGCGGA GAGT GGC
                      C CAGACA
GAM3783 BPES 3' GCCTCCCTCGCGCCCCC 85464
                                      \mathsf{A}_{-}
                   GCCT CTCGCGCCGCCCG
```

GCCGC GA GAGC CGGC

```
GG
GAM3783 C20orf178 5' CGGCGCCCGCTCCCAGTCCCG 85465 TA G CCG
                   CGGCGCC CTC CG CCCG
                   GCCGCGG GAG GT GGGC
                      GC G CA
                                       TACTCG __
GAM3783 C2orf6 5' CGGCGCCCGCCTTGCCC 85466
                   CGGCGCC CGCC GCCC
                    GCCGCGG GCGG CGGG
                           AA
GAM3783 C2orf7 5' CGCCGCCCGCCGCGCGCGTCGCT 85467 G AC _ C
        CG
                     CG CGCCT TCGCGC CGC CG
                   GC GCGGG GGCGCG GCG GC
                    G GC CA A
GAM3783 CASP9 5' CGGGCCTCGGCCGCCC 85468 C TAC C
                   CGG GCC TCG GCCGCCC
                   GCC CGG AGC CGGCGGG
GAM3783 CDC42BPB 5' CGGCGCCTCCTCGCCGCCC 85469
                                         A CG
                   CGGCGCCT CT CGCCGCCC
                   GCCGCGGA GG GCGGCGGG
                       _ A_
GAM3783 CENTG2 5' GCTGCGTACTGCGCCGCCCG 85470 _ C C
                   GC GC TACT GCGCCGCCCG
                   CG CG ATGA CGCGGCGGCC
                    A C
GAM3783 CLLD8 5' GCGTTTTCTACGCCGCCCG 85471
                                       CCTA C
                   GCG CT GCGCCGCCCG
                   CGC GA TGCGGCGGC
                    AAAA \_
GAM3783 CSR1
            5' CGCCGTCCTAGGCGCCGCCCG 85472 G _ CTC
                   CG CG CCTA GCGCCGCCCG
                   GC GC GGAT CGCGGCGGCC
                    GAC_
GAM3783 CTSO 5' CGGCTCCTCTGCCGCCC 85473
                                       G A CGC
                   CGGC CCT CT GCCGCCC
                   GCCG GGA GA CGGCGGG
GAM3783 DKFZP434H0820 5' CGACGCCGCCGCTGTTGCCCG 85475
                                               TAC GCC_
```

CGGCGCC TCGC GCCCG

CGGA GAGCGCGGCGGCC

```
GCTGCGG GGCG CGGGC
                        C__ ACAA
GAM3783 DKFZP434H0820 5' CGCCGCTCCCGCCCCC
                                        85474 TA G
                     CGCC CTC CGCCGCCC
                     GCGG GAG GCGGCGGG
                      C G
GAM3783 DKFZP434N014 5' GCGCCTCTGCGCCGCCCG 85476
                                                A C
                     GCGCCT CT GCGCCGCCCG
                     111111 11 1111111111
                     CGCGGA GA CGCGGCGGGC
GAM3783 DKFZP566K1924 5' GCGCCGTCGCCGCCGTCCG 85477
                                                 TAC _ C
                     GCGCC TCGC GCCG CCG
                     11111 1111 1111 1111
                     CGCGG AGCG CGGC GGC
                       C G A
GAM3783 DIc2 5' GCTCCGCCTCGCGCCCCG 85478 G TA
                     GC CC CTCGCGCCGCCCG
                     CG GG GAGCGCGGCGGC
                      A CG
GAM3783 DRAP1 5' CGGGCCTGCTCGCCGCCCG 85479
                                           C A GC
                     CGG GCCT CTC GCCGCCCG
                     GCC CGGA GAG CGGCGGGC
                      _ C _
                                           \mathsf{TA}\ \_\ \_
GAM3783 FHM2
            5' GCCGCTGCGCCGCCCCG 85480
                     GCC CT CGC GCCGCCCG
                     CGG GA GCG CGGCGGCC
                      C_C G
GAM3783 EIF3S9 5' GCTGCCTACTCGCAGGGCTCCG 85481
                                                 CC
                     GC GCCTACTCGCG GC CCG
                     CG CGGATGAGCGT CG GGC
                      Α
                           CC A
GAM3783 EMILIN-2 5' CGGCGGCCAGGGCGCCGCCCG 85482
                                              TACTC
                     CGGCG CC GCGCCGCCG
                     GCCGC GG CGCGGCGGCC
                       C TCC_
GAM3783 FADS3 5' CGCCGCCTCCGCCGCCGCCCG 85483 G AT _
                     CG CGCCT C CGC GCCGCCCG
                     GC GCGGA G GCG CGGCGGCC
                      G __ G
                                             CCTAC __
GAM3783 FHOD2 5' CGGCGGTCGGCTGCCGCCCG 85484
                     CGGCG TCG C GCCGCCCG
```

```
GCCGC AGC G CGGCGGGC
                      C____ C A
GAM3783 FLJ10350 5' GCGCCGTCCGCGCCGTTCG 85485
                                           TAC
                                                 CC
                    GCGCC TCGCGCCG CG
                    CGCGG GGCGCGGC GC
                       CA
                            AA
GAM3783 FLJ13639 3' GGCGTCCACTCACACGCC 85486
                                          С
                                               С
                    GGCG CTACTCGCGC GCC
                     1111 11111111111111111
                     CCGC GGTGAGTGTG CGG
GAM3783 FLJ20539 5' CGCCGCCGCCGCCGCCGC 85487
                                            G TAC _
                    CG CGCC TCGC GCCGCCCG
                    GC GCGG GGCG CGGCGGGC
                     G C G
GAM3783 FOXO3A 5' GGCGCCGCCGCCGCCGCC 85488
                                            TAC
                    GGCGCC TCGC GCCGCC
                    CCGCGG GGCG CGGCGG
                       C__ G
GAM3783 GPR
            5' CGGCTCCGCGCGCCCCG 85489
                                          G TACT
                    CGGC CC CGCGCCGCCCG
                     GCCG GG GCGCGGGGC
                      A C
GAM3783 GRIN3A 5' CGGCGCCTGTCACCCG 85490
                                          AC G
                    CGGCGCCT TCGC CCG
                    GCCGCGGA AGTG GGC
                        \mathsf{C}_{-}
GAM3783 H2AFY2 5' CGCCGCCTGCTCCCGGCGCCCG 85491 G A G C
                    CG CGCCT CTC CG CGCCCG
                    GC GCGGA GAG GC GCGGGC
                     GCGC
GAM3783 HCNGP
             3' CAGCGCCTGGCTCCCGTGCTGC 85492
                                              A C C
        C
                     CGGCGCCT CTCG GC GCC
                     GTCGCGGA GGGC CG CGG
                        CCGA A A
GAM3783 HERPUD1 5' CGGCGTCTCAGCCGCCCG 85493
                                           CCTA C
                    CGGCG CTCG GCCGCCCG
                     GCCGC GAGT CGGCGGGC
                      \mathsf{A}_{-}
                                         _ GC
GAM3783 HIC
            5' CGCCTAGCTCGCCGCCCG 85494
                    CGCCTA CTC GCCGCCCG
```

```
GCGGAT GAG CGGCGGGC
                      C _
GAM3783 HSF1 5' CGGGCCGCCGCCGCCCCG 85495 C TACT
                   CGG GCC CGC GCCGCCCG
                   GCC CGG GCG CGGCGGGC
                    _ C___ G
GAM3783 ICSBP1 5' CGCCGTCTCGCCGCCCG 85496
                                       TAC G
                   CGCC TC CGCCGCCCG
                   GCGG AG GCGGCGGCC
                     C A
GAM3783 IL-17RE 3' CGCCGCCCAGCGCTGCCCG 85497 G CTC C
                   CG CGCCTA GCGC GCCCG
                   GC GCGGGT CGCG CGGGC
                    G
GAM3783 IMAGE:4907098 5' CGGCGCACTGGCCGCCC 85498 CT CGC
                   CGGCGC ACT GCCGCCC
                   GCCGCG TGA CGGCGGG
                      __ C__
GAM3783 KIAA0010 5' CGGCGCCCGCCCC
                                       TACT G
                                 85499
                   CGGCGCC CGC CCGCCC
                   GAM3783 KIAA0014 3' CGCCGCCTCCGGCCCCG 85500 G AT C
                   CG CGCCT C CG GCCGCCCG
                   GC GCGGA G GC CGGCGGGC
                                         TA C _
GAM3783 KIAA0247 5' CGCCGCTTGCGCGCGCCCG 85501
                   CGCC CT GCGC CGCCCG
                   GCGG GA CGCG GCGGGC
                     C_ A C
GAM3783 KIAA0543 3' GGCGCCCACTTCCTGCC 85502
                                         CGCG _
                   GGCGCCTACT CC GCC
                   CCGCGGGTGA GG CGG
                       A___ A
GAM3783 KIAA0672 5' CGCCGCCTACTCCTCCC 85503 G
                                          CGCG G
                   CG CGCCTACT CC CCC
                   GC GCGGATGA GG GGG
                    G
                                       GCCTA _
GAM3783 KIAA0930 5' CGGCCTCGGCGCCCC 85504
                   CGGC CTCG CGCCGCCC
```

```
GCCG GAGC GCGGCGGG
                        _ C
GAM3783 KIAA1028 5' CGCGCGCCGCCGCCGCCCG 85505 TAC G
                   CG GCGCC TC CGCCGCCCG
                   GC CGCGG GG GCGGCGGCC
                    G C____
GAM3783 KIAA1028 5' GCGCGCGCGCGCGCCCCG 85506
                                          CTACT
                   GCGC CGCGCCGCCG
                   CGCG GCGCGGGGC
                     CGCGC
GAM3783 KIAA1280 5' GGCCCCTCACAGCTGTCCG 85507 G TA _ CGC
                   GGC CC CTCGC GC CCG
                   CCG GG GAGTG CG GGC
                         T ACA
GAM3783 KIAA1458 5' CGCCGCCTCCGCCGCCC 85508 TA G
                   CGCC CTC CGCCGCCC
                   GCGG GAG GCGGCGGG
                     CG _
GAM3783 KIAA1893 5' CGCCGCCGCCGCCGCCGC 85487 G TAC
                   CG CGCC TCGC GCCGCCCG
                   GC GCGG GGCG CGGCGGGC
                    G C G
GAM3783 MAN1C1 5' GGCGTCCGGAGCGCCGCCCG 85509
                                          TACTC
                   GGCG CC GCGCCGCCG
                   CCGC GG CGCGGCGGC
                     A CCT__
GAM3783 MAP-1 5' CGTGCCGCCACCCGCGCCCC 85510 _ _ T
        G
                    CG GC GCC ACTCGCGCCGCCCG
                   GC CG CGG TGGGCGCGGCGGC
                    AG_{-}
GAM3783 MCF2L 3' CGGCGCCTGCCGCCC
                               85511
                                       ACTCGC
                   CGGCGCCT GCCGCCC
                   GCCGCGGA
                             CGGCGGG
GAM3783 MGC14425 3' GCGCGCCGCCGCTGCCCG 85512
                                         CTAC _ C
                   GCGC TCGC GC GCCCG
                   CGCG GGCG CG CGGGC
                     C___ G A
GAM3783 MGC2647 5' GCGCCGCCGCCGCCCG 85513
                                        TAC G
                   GCGCC TC CGCCGCCCG
```

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CGCGG GG GCGGCGGCC
                                         AC__ _
GAM3783 MGC2865 5' CGGCGCCTTGCGTCACGTCCG 85514
                   CGGCGCCT TCGCG CCG
                   GCCGCGGA AGTGC GGC
                      ACGC A
GAM3783 MGC4172 5' GGGCCCACGCCGCCC
                               85515 C TACT
                   GG GCC CGCGCCGCCC
                   CC CGG GTGCGGCGGG
GAM3783 MICAL 5' GGCGCGGGGCGCCCCG 85516
                                       CTACTC
                   GGCGC GCGCCGCCG
                   CCGCG CGCGGCGGC
                     CCC_
GAM3783 MIP-T3 5' CGGCGTCCGCCGCCC 85517 CCTAC G
                   CGGCG TC CGCCGCCC
                   GCCGC AG GCGGCGGG
GAM3783 MOT8 5' CGGCGCCCGCGCCCGCTCG 85519
                                        TACT C
                   CGGCGCC CGCGCC GC CG
                   GCCGCGG GCGCGG CG GC
                          GA
GAM3783 MOT8 5' CGCCGCCTCCCGCCGCCCG 85518
                                       TA G
                   CGCC CTC CGCCGCCCG
                   GCGG GAG GCGGCGGGC
                    CG G
GAM3783 MSRA 5' CGGGCCTGGAGGCCGCCG 85520 C ACTCGC
                   CGG GCCT GCCGCCCG
                   GCC CGGA CGGCGGCC
                    _ CCTC_
GAM3783 PCCX2 5' CGGCGCCGCCGCCGCCGC 85437
                                       TAC
                   CGGCGCC TCGC GCCGCCCG
                   GCCGCGG GGCG CGGCGGGC
                     C__ G
GAM3783 PDCD6IP 5' CAGCGCCTCCGCCGCC 85521
                                       TAC G
                   CGGCGCC TC CGCCGCC
                   GTCGCGG AG GCGGCGG
GAM3783 PTR4 5' CGGCGCCCGCTCGCCCG 85522
                                      TA G
                   CGGCGCC CTCGC CCG
```

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GCCGCGG GAGCG GGC
                      GC
GAM3783 QSCN6 5' CGGCGCCGCGCACCGCC 85523 TACTC
                   CGGCGCC GCGCCGCC
                   GCCGCGG CGTGGCGG
                      CGC
GAM3783 RAB21 5' CGTCGCTTCCCGGCCGCCCG 85524 G CTA C
                   CG CGC CTCG GCCGCCCG
                   GC GCG GGGC CGGCGGC
                    A AA
GAM3783 RHOBTB1 5' GCGCGCGCGCGCCCCG 85525
                                         CTACT
                   GCGC CGCGCCGCCG
                   CGCG GCGCGGGGC
                    CGCC_
GAM3783 RINZF 5' CGCCGCCGCCGCCGCCCC 85487 G TAC
                   CG CGCC TCGC GCCGCCCG
                   GC GCGG GGCG CGGCGGGC
                    G C__ G
GAM3783 RPC32 5' CGGCGCTTGACTGCCGCCCG 85526
                                         CT_ CGC
                   CGGCGC ACT GCCGCCCG
                   GCCGCG TGA CGGCGGGC
                     AAC
GAM3783 RTCD1 5' CGGCGCCTCTCGGGACAC 85527
                                        A CGC
                   CGGCGCCT CTCG CGC
                   GCCGCGGA GAGC GTG
                      CCT
GAM3783 SLC21A11 5' CGCCGCTCCGGCCGCCCCG 85528 G CTA C
                   CG CGC CT GC GCCGCCCG
                   GC GCG GG CG CGGCGGCC
                    G A_ C G
GAM3783 SOX17 5' CGGCCCGAAGCCGCCGCCCG 85529
                                        G TACTCG
                   CGGC CC CGCCGCCCG
                   GCCG GG GCGGCGGCC
                     GAM3783 TMEM8 5' CGGCCCCCGCCGCCGCCG 85530
                                        G TATCG
                   CGGC CC CGCCGCCCG
                   GCCG GG G GCGGCGGGC
                    \mathsf{G}\;\mathsf{GC}_{-}
GAM3783 TOMM40 5' CGGCGCCTGCTCCCGGCC 85531
                                        A G CC
                   CGGCGCCT CTC CG GCC
```

11111111 111 11 111

```
GCCGCGGA GAG GC CGG
                       C G __
GAM3783 ZDHHC2 5' CGCCGTTCCCCGCCGCCCG 85532 TA G
                    CGCC CTC CGCCGCCCG
                    GCGG GGG GCGGCGGCC
                     CAA _
GAM3783 LOC124402 5' GGCGCCGCCGCGCTGCCCG 85533
                                           TAC C
                    GGCGCC TCGCGC GCCCG
                    CCGCGG GGCGCG CGGGC
                      С
GAM3783 LOC125704 5' CGCGCGCCCGCCGCCC 85414
                                          TACTCG
                    CG GCGCC
                             CGCCGCCC
                    GC CGCGG GCGGCGGG
                    G
GAM3783 LOC126526 5' GCGCCCACTCGCGCCCCC 85534
                    GCGCCTACTCGCGCCGCCCG
                    CGCGGGTGAGCGCGGCGGC
GAM3783 LOC129642 5' CGGCGCTCCGGCCGCCC 85535
                                          CTAC C
                    CGGCGC TCG GCCGCCC
                    GCCGCG GGC CGGCGGG
                      Α____
                                          _ TACT
GAM3783 LOC129642 5' CGGCCGCCCGCGCCCCTCG 85536
                    CGGC GCC CGCGCCGC CG
                    GCCG CGG GCGCGGCG GC
                     G
GAM3783 LOC146223 5' CGCCGCCGCCGCCGCCCC 85487 G TAC
                    CG CGCC TCGC GCCGCCCG
                    GC GCGG GGCG CGGCGGGC
                    G C_ G
GAM3783 LOC146562 3' CGGCGCCCTACTGTGCTGCC 85537
                                            CGC C
                    CGGCGCC TACT GC GCC
                    GCCGCGG ATGA CG CGG
                      G CA_A
GAM3783 LOC147463 5' GCGCGCTCCCGCCGCCCG 85538
                                          CTA G
                    GCGC CTC CGCCGCCCG
                    CGCG GAG GCGGCGGCC
                     C__ G
GAM3783 LOC148534 5' GGCGCTGGCCAGTGCCGCCCG 85539
                                            CTA CGC
                    GGCGC CT GCCGCCCG
```

IIIII II IIIIIIII

```
ACC TCA
GAM3783 LOC149297 5' CGGCATGGCGACGCCGCTCG 85540 CCTACT C
                    CGGCG CGCGCCGC CG
                    GCCGT GCGCGGCG GC
                      ACCGCT
                             Α
GAM3783 LOC149576 3' GCGTTAGCCCGCCGCCCG 85541 CC CT G
                    GCG TA C CGCCGCCCG
                    CGC AT G GCGGCGGCC
                     A CG
GAM3783 LOC150275 5' CGGCGGCCTCGGCCGCCCG 85542
                                           CCTA C
                    CGGCG CTCG GCCGCCCG
                    GCCGC GAGC CGGCGGCC
                      CG
GAM3783 LOC151009 5' GGTGCCTACCCCTCACTGTCCG 85543 C
                                             G CGC
                    GG GCCTACTC CGC CCG
                    CC CGGATGGG GTG GGC
                    Α
                        GA ACA
                                         C CTAC
GAM3783 LOC151534 5' CGGGCTCCGCGCCGCTCG 85544
                                                  C
                    CGG GC TCGCGCCGC CG
                    GCC CG GGCGCGGCG GC
                     _ A___
GAM3783 LOC153571 3' CAGCGCCCCTCGCCGCCCG 85545
                                            TA G
                    CGGCGCC CTC CGCCGCCCG
                    GTCGCGG GGG GCGGCGGCC
                                            G TA
GAM3783 LOC155382 5' CGGCCCCGCCCGCCCGCCCCG 32642
                    CGGC CC CTCGCGCCGCCCG
                    GCCG GG GGGCGCGGGC
                     _{-} GC
GAM3783 LOC160932 5' GCGCGCTCGGGCCGCTGCCCG 85546
                                            CTA C __
                    GCGC CTCG GCC GCCCG
                    CGCG GAGC CGG CGGGC
                     C_ C CGA
GAM3783 LOC160932 5' CGGCGCCCGCGCGCTCG 85547
                                           ACT _
                    CGGCGCCT CGCGCCG
                    GCCGCGGG GCGCG GC
                       C__ A
                                           ACTC G C
GAM3783 LOC162022 5' CAGCGCCTGTGCCCGCTCG 85548
                    CGGCGCCT GC CCGC CG
```

CCGCG GG CGGCGGCC

```
GTCGCGGA CG GGCG GC
                      CA__ _ A
GAM3783 LOC162417 5' GGTGCCCCTCGCCGCCG 85549 C ACTCG
                   GG GCCT CGCCGCCCG
                   CC CGGG GCGGCGGCC
                    A GA
GAM3783 LOC165257 5' CGGCGCCTCGGGGCGCCGCC 85550 ACTC
                   CGGCGCCT GCGCCGCC
                   GCCGCGGA CGCGGCGG
                      GCCC
GAM3783 LOC167026 5' CGCCGCTCCGCCGCCC 85551 TA G
                   CGCC CTC CGCCGCCC
                   GCGG GAG GCGGCGGG
GAM3783 LOC201161 5' GCGCGCCCCCGCCGCCCG 85552
                                         CTA G
                   GCGC CTC CGCCGCCCG
                   CGCG GGG GCGGCGGC
                     C__ G
GAM3783 LOC201514 5' CGGCGCCTGTCCGCGAGC 85553
                                        AC CC
                   CGGCGCCT TCGCG GC
                   GCCGCGGA GGCGC CG
                      CA T
GAM3783 LOC201780 5' CGGTCGCCGCAGTCGCCGCCG 85554 TACTCG
                   CGG CGCC CGCCGCCCG
                   GCC GCGG
                             GCGGCGGGC
                    A CGTCA_
GAM3783 LOC219654 5' GCGCCCCGCGCGCTGCCCG 85555 ACT C
                   GCGCCT CGCGC GCCCG
                   CGCGGG GCGCG CGGGC
                      GC_ A
GAM3783 LOC221501 3' GGCGCGCCCGCCCC
                                         _ ACTCG
                                  85556
                   GGCGC CT CGCCGCCC
                    CCGCG GG GCGGCGGG
                     С
GAM3783 LOC221882 5' GCGCCCGCCGCCGCCG 85557
                                         TATG
                   GCGCC C C CGCCGCCCG
                   CGCGG G G GCGGCGGCC
                     GC _ _
GAM3783 LOC254102 5' GCCTGTCCGCGCCCCC 85558
                                         AC
                   GCCT TCGCGCCGCCCG
```

```
CGGA GGCGCGGCGGC
                     CA
GAM3783 LOC254124 3' CGGCTGTCCGCGCCCCG 85559 GCCTAC
                   CGGC TCGCGCCGCCG
                   GCCG GGCGCGGGC
                     ACA
GAM3783 LOC255426 5' CGCCGCCGCCGCCGCCCG 85487 G TAC
                   CG CGCC TCGC GCCGCCCG
                   GC GCGG GGCG CGGCGGGC
                    G C G
GAM3783 LOC255838 5' CAGCGCTACCGCCGCCC 85560
                                        C TCG
                   CGGCGC TAC CGCCGCCC
                   GTCGCG ATG GCGGCGGG
GAM3783 LOC256160 5' CGGTCGCCGCAGTCGCCGCCG 85554 TACTCG
                   CGG CGCC CGCCGCCG
                        GCC GCGG GCGGCGGCC
                    A CGTCA
GAM3783 LOC90024 5' CAGCGCCCCGCCCC
                                        ACTCG C
                                85456
                   CGGCGCCT CGCCGCC
                   GTCGCGGG GCGGCG G
GAM3783 LOC90133 5' CGTCGCCTTGCCGCCGCCCG 85561 G ACTCG
                   CG CGCCT CGCCGCCCG
                   GC GCGGA GCGGCGGC
                    A ACG
GAM3783 LOC90379 5' CGCCGCCGCCCTGCTGCCCG 85562 G TA GC C
                   CG CGCC CTC GC GCCCG
                   GC GCGG GGG CG CGGGC
                    G C_ A_ A
GAM3783 LOC91300 5' CGCCGCCGCCGCCGCCG 85563
                                        TAC
                   CGCC TCGC GCCGCCCG
                   GCGG GGCG CGGCGGGC
                     C__ G
GAM3783 LOC91300 5' CGCCGCCGCCGCCGCCG 85563
                                        TAC _
                   CGCC TCGC GCCGCCCG
                   GCGG GGCG CGGCGGGC
                     C__ G
GAM3783 LOC91547 5' GCGCACCCGCGCCCC
                                 85564
                                       CT
                   GCGC ACTCGCGCCGCC
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CGCG TGGGCGCGGCGG

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GAM3783 LOC91978 5' CGGCCGCCCCCGCCGCCG 85565 TACT G
                   CGGC GCC C CGCCGCCCG
                   GCCG CGG G GCGGCGGGC
                     G G
GAM3784 CDC2L2 5' CTGGCTTCTGCGCACGCGCCGG 85568
                                           CGT
                   CTGGCT CTG TGT GCGCGCCGG
                   GACCGA GAC GCG TGCGCGGCC
GAM3784 IRS1
           5' CTGGCTCTGCGCGCC
                              85569
                                      CTGGTGT
                   CTGGCTC
                            TGCGCGCC
                   GACCGAG ACGCGCGG
GAM3784 LIF 3' CTGGCCCTGGCGCTTGTGTCGG 85570 T GCGCGC
                   CTGGC CCTGGTGTT CGG
                   GACCG GGACCGCGA GCC
                         ACACA_
GAM3784 MGAT5 5' CTGGCTCCTGTGTCAGC 85571
                                         G C
                   CTGGCTCCTG TGTTG GC
                    GACCGAGGAC ACAGT CG
GAM3784 MYO1D 3' CTGGCTCCTGGCTGAGGGGCTG 85572
                                         GTTGCGC C
        G
                    CTGGCTCCTGGT GC GG
                    11 11
                    GACCGAGGACCG
                                  CG CC
                        ACTCCC_ A
GAM3784 ASE-1 3' GGCTCCTGCTGGCTGCGC 85573
                                         G
                   GGCTCCTG TG TTGCGC
                   CCGAGGAC AC GACGCG
                      G C
GAM3784 HSA404617 3' CTGGCTCCTGTGTGCTCAAGGT 85574 _ G C__ C
        GCTGG
                       TGGCTCCTG GTGTT CG GC GG
                   ACCGAGGAC CACGA GT CG CC
                       A _ TCCA A
                                           CCT G
GAM3784 KIAA0820 5' CTGGCTGCTGCTGCGCCGG 85575
                   CTGGCT G TGTTGC GCGCCGG
                   GACCGA C ACGACG CGCGGCC
                       __ G
GAM3784 KR18
            3' CGTTCCTGGTGCCCAGGCTGG 85576 GC
                                             GCC
                   TG TCCTGGTGTT CG GC GG
```

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GC AGGACCACGG GT CG CC
                     A_ _ C A
GAM3784 LOC152195 5' TGGCCCCTGTTGCGC
                                  85577 GGT
                    TGGCTCCT GTTGCGC
                    ACCGGGGA CAACGCG
GAM3784 LOC196047 5' CTGGCTGCTGGTGCTTTGCTGG 85578
                                                  GCGC C
                                             С
                    CTGGCT CTGGTGTT GC GG
                    GACCGA GACCACGA CG CC
                           AA_ A
                       С
GAM3784 LOC200205 3' CTGGCTCCTGAGCCCTGCGC 85579
                                              _ G
                    CTGGCTCCTG GT TTGCGC
                    GACCGAGGAC CG GACGCG
                        T G
                                             TTC C
GAM3784 LOC221935 3' CTGGCTCCTGGGTGGCACTGG 85580
                    CTGGCTCCTGG GT G GCGC GG
                    GACCGAGGACC CA C CGTG CC
                         \_ \ \_ \_ \ A
GAM3785 BAIAP3 3' CCTGCCCTTTGCATCCCCTC 85583 C GAG GCA
                    CC GC CC CATCCCCTC
                    GG CG GG GTAGGGGAG
                     A ___ AAAC
GAM3785 CELSR3 5' CCCCGGGCCCCCGCCCCTCCG 85585
                                           G A GCACAT
                    CCC CG GCC CCCCTCCG
                    GGG GC CGG
                                GGGGAGGC
                     _ C GGGC_
GAM3785 CELSR3 5' CCGCGGCCGGAGCCCCTCCG 85584
                                          A CACAT
                    CCGCG GCCG CCCCTCCG
                    GGCGC CGGC GGGGAGGC
                      _ CTC__
GAM3785 COL18A1 3' CCTCCGAGCCGCCGGTCCTCTC 85586
                                           G
                                                ACA C
        CG
                      CC CGAGCCGC TCC CTCCG
                    GG GCTCGGCG AGG GAGGC
                     AG
                          GCC A
GAM3785 COL18A1 3' CCTCCGAGCCGCCGGTCCTCTC 85586 G_
                                                ACA C
                      CC CGAGCCGC TCC CTCCG
        CG
                    GG GCTCGGCG AGG GAGGC
                          GCC A
                     AG
GAM3785 COL18A1 3' CCTCCGAGCCGCCGGTCCTCTC 85586
                                           \mathsf{G}_{-}
                                                ACA C
        CG
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```

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GG GCTCGGCG AGG GAGGC
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                         GCC A
GAM3785 CPNE7 5' CCCGCGAGTCGCGCCCC 85587
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                   CCCGCGAG CGC
                                 CC CC
                   GGGCGCTC GCG
                                 GG GG
                      A C C
GAM3785 DAPK1 5' GCGAGTTGCCGAGTCCCCTCCG 85588
                                          CC ACA
                   GCGAG GC TCCCCTCCG
                   CGCTC CG AGGGGAGGC
                     AA GCTC
GAM3785 EPS8
            5' CCGCGAGCCGCGGAGCCGCCT 85589
                                            ACAT
                   CCGCGAGCCGC CC CCT
                   GGCGCTCGGCG GG GGA
                        CCTC C
GAM3785 HCN4
           5' CCCGCGAGCTCGCCTCGCCTCC 85590
                                           ACA C
                   CCCGCGAGC CGC TC CCTCC
                   GGGCGCTCG GCG AG GGAGG
                       A G__ C
GAM3785 IRS1
           5' GCGCGCCGCCCCTCCG 85591 A CACA
                   GCG GCCG TCCCCTCCG
                    CGC CGGC GGGGGAGGC
                    G C
GAM3785 KCNJ6 5' CCGCGGGTCTCCACCCCTCCG 85592
                                         AGCCGCA T
                   CCGCG
                          CA CCCCTCCG
                   GT GGGGAGGC
                    GGCGC
                     CCAGAG_ _
                                        GA
GAM3785 LDB1
            5' CCGCCGGCCGCACAAAGACTC 85593
                                             TCCC
                   CCGC GCCGCACA CTC
                   GGCG CGGCGTGT GAG
                     GC
                          TTCT
            5' CCGGCGAGCTCGCCCCTCC 85594 C
                                          _ ACATC
GAM3785 LMO2
                   CC GCGAGC CGC CCCTCC
                    GG CGCTCG GCG GGGAGG
                       Α
GAM3785 NGB
            5' CCGCGACGCGGTCCCCTCCG 85595
                                         GC ACA
                   CCGCGA CGC TCCCCTCCG
                    GGCGCT GCG AGGGGAGGC
                      __ CC_
                                         _ GCACAT
GAM3785 NRXN2 5' CCCGCGAAGCCCCCTCC 85596
                   CCCGCGA GCC
                                CCCCTCC
```

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GGGCGCT CGG GGGGAGG
                      Т
GAM3785 PPT2 3' CCCCGGGCCCTACCCCCTC 85597 G A GCAC
                   CCC CG GCC ATCCCCTC
                   GGG GC CGG TGGGGGAG
                    _ C GA__
GAM3785 RAD17 5' CCCGGAGCTGCATCCCCT 85598
                                       C C CA
                   CCCG GAGC GCA TCCCCT
                   GGGC CTCG CGT AGGGGA
                    __ A ___
GAM3785 RAD17 5' CCCGGAGCTGCATCCCCT 85598
                                       C C CA
                   CCCG GAGC GCA TCCCCT
                   GGGC CTCG CGT AGGGGA
                     Α
GAM3785 RAD17 5' CCCGGAGCTGCATCCCCT 85598 C C CA
                   CCCG GAGC GCA TCCCCT
                   GGGC CTCG CGT AGGGGA
                    _ A __
GAM3785 SIGLEC6 5' CGGAGCTCCACTCCCTCT 85599 C CG A
                   CG GAGC CAC TCCC CT
                   GC CTCG GTG AGGG GA
                    _ AG _ A
GAM3785 SMURF1 5' CCCGAGCCGCCGCCGCCTCCG 85600 G ACAT
                   CC CGAGCCGC CC CCTCCG
                   GG GCTCGGCG GG GGAGGC
                       GC__ C
GAM3785 WW45 5' CCCGAGCCGCCCCCC 85601 G ACATCC
                   CC CGAGCCGC CCTCC
                   GG GCTCGGCG GGAGG
                      GC____
GAM3785 CBLN1 5' CCGGGACTAGCGTCCCCTCCG 85602 C GCC ACA
                   CCG GA GC TCCCCTCCG
                   GGC CT CG AGGGGAGGC
                    C GAT C__
GAM3785 CBLN1 5' CCGCGACTAGCGTCCCCTCCG 85603 GCC ACA
                   CCGCGA GC TCCCCTCCG
                   GGCGCT CG AGGGGAGGC
                     GAT C__
GAM3785 DKFZp547A023 5' CCGGGCTCCGCTCCG 85604 CGAG ACA
                   CCG CCGC TCCCCTCCG
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GGC GGCG AGGGGAGGC
                     CCGA
GAM3785 EMILIN-2 5' CCGCGGCCGCCCCTCC 85605 A ACAT
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                    GGCGC CGGCG GGGGAGG
GAM3785 FLJ10761 3' CCCTTGGCCACGTCCCCTCCG 85606
                                          GCGA ACA
                    CCC GCCGC TCCCCTCCG
                    GGG CGGTG AGGGGAGGC
                     AAC C
GAM3785 FLJ14721 3' CCTGCGAGCCGCCCACCC 85607 C
                                             Α
                    CC GCGAGCCGC CATCC
                    11 111111111 11111
                    GG CGCTCGGCG GTGGG
                         G
GAM3785 FLJ20288 5' CCAGCGCCGCGTCCCCTCCG 85608 C GA ACA
                    CC GC GCCGC TCCCCTCCG
                    GG CG CGGCG AGGGGAGGC
                     T __ C__
GAM3785 FLJ21135 5' CCGCGAGCCACCCCTCC 85609
                                            ACAT
                    CCGCGAGCCGC CCCCTCC
                    GGCGCTCGGTG GGGGAGG
GAM3785 KIAA0116 5' CCCACGAGCCGCACGTCATCT 85610
                                              A CC
                    CCCGCGAGCCGCAC TC CT
                    GGGTGCTCGGCGTG AG GA
                         C TA
GAM3785 KIAA1649 5' CCCGCGAGCCCGCCCCTC 85611
                                            GCACAT C
                    CCCGCGAGCC CCCCT C
                    GGGCGCTCGG GGGGAG
                        GC____ A
GAM3785 MAPKAPK2 5' CCCGCGGCCCCCCCCC 85612
                                           A ACAT
                    CCCGCG GCCGC CCCCTCC
                    GGGCGC CGGCG GGGGAGG
GAM3785 MAPKAPK2 5' CCCGCGGCCCCCCCCC 85612
                                           A ACAT
                    CCCGCG GCCGC CCCCTCC
                    GGGCGC CGGCG GGGGAGG
GAM3785 MGC11303 5' CCCGCGAGGTGCGCTCACTCCG 85613
                                              C_ A TCCC
                    CCCGCGAG CGC CA CTCCG
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GGGCGCTC GCG GT GAGGC
                      CAC A __
                                         GAG C
GAM3785 MGC7036 3' CCCACCCTGCACATCCCTTC 85614
                   CCCGC CC GCACATCCC TC
                   GGGTG GG CGTGTAGGG AG
                      __ A
GAM3785 OATPRP4 5' CCCGGGCTCATCCCCTCC 85615
                                        CGAGCC A
                   CCCG GC CATCCCCTCC
                   GGGC CG GTAGGGGAGG
                     C A
GAM3785 SEC15B 5' CCCGCAGCGCGTCCCCTCCG 85616
                                         G C ACA
                   CCCGC AGC GC TCCCCTCCG
                   GGGCG TCG CG AGGGGAGGC
                     С
GAM3785 SLK 5' CCGCGAGCCTAGGGTCTCCTCC 85617
                                          GCACA C
        G
                    CCGCGAGCC TC CCTCCG
                   GGCGCTCGG AG GGAGGC
                       ATCCC A
GAM3785 VDU1 5' CCTGCAGCCGCACCTC 85618 C G
                                          CATCC
                   CC GC AGCCGCA CCTC
                   GG CG TCGGCGT GGAG
                    Α _
GAM3785 LOC120772 5' CCTGCTAGCCCCTTCCCCTCCG 85619 C G GCACA
                   CC GC AGCC TCCCCTCCG
                   GG CG TCGG AGGGGAGGC
                    A A GGA
GAM3785 LOC138046 5' CCTGGAGCCAGCCCTCC 85620 GC CACAT
                   CC GAGCCG CCCCTCC
                   GG CTCGGT GGGGAGG
                    AC C___
GAM3785 LOC145438 5' CGGAGTGGCCTCCCCTCCG 85621 C CC ACA
                   CG GAG GC TCCCCTCCG
                   GC CTC CG AGGGGAGGC
                    AC G
GAM3785 LOC148530 5' GCTTCCGCTCCCTCCG 85622 GAG ACA
                   GC CCGC TCCCCTCCG
                   CG GGCG AGGGGAGGC
                    AA_{-}
GAM3785 LOC221496 3' CCTGCGAGCCGAACTCCTCT 85623 C C A C
                   CC GCGAGCCG AC TCC CT
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11 11111111 11 111 11

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GG CGCTCGGC TG AGG GA
                         T _ A
GAM3785 LOC252995 3' CCCCGAGCTGACCCCCTC 85624 G CGCAC
                    CCC CGAGC ATCCCCTC
                    GGG GCTCG TGGGGGAG
                     _ AC___
GAM3785 LOC254381 5' CCGGTCCTGCGTGTCCCCTCCG 85625
                                            CGAG _ ACA
                    CCG CC GC TCCCCTCCG
                    GGC GG CG AGGGGAGGC
                     CA A CAC
GAM3785 LOC256451 3' CCCACGAGCCGCGCGTCGCCTT 85626
                                               ACA C C
        CG
                     CCCGCGAGCCGC TC CCT CG
                    GGGTGCTCGGCG AG GGA GC
                         CGC C A
GAM3785 LOC256867 5' CCTGCTAGCCCCTTCCCCTCCG 85619 C G GCACA
                    CC GC AGCC TCCCCTCCG
                    GG CG TCGG AGGGGAGGC
                     A A GGA
GAM3785 LOC56996 5' CCCGCGAGCCGGGGGGCTCCG 85627
                                            CACATCCC
                    CCCGCGAGCCG CTCCG
                    GGGCGCTCGGC
                                  GAGGC
                        CCCCC
GAM3786 CCNT2 3' AGGTTTAATTTCATTTTTAT 85630
                                          GGCT
                    AGGTTTAATT TTTTTAT
                    TCCAAATTAA AAAAATA
                        AGT_
GAM3786 GHRHR 3' TACAGGTTTATTGGCTCCT 85631
                    TACAGGTTTA TTGGCTTTT
                    ATGTCCAAAT AACCGAGGA
GAM3786 PTPRB 3' TACAGGTTGAATTAGTTTT 85632
                                         T C
                    TACAGGTT AATTGG TTTT
                    ATGTCCAA TTAATC AAAA
                       С
GAM3786 TSGA10 5' AGATTTAAGCCTTTTTAT 85633
                                         ATT
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GAM3786 MGC20533 3' ACAGGTTTACTTTTTTA 85634 AATTG ACAGGTTT GCTTTTTTA |||||||||||||||

AGGTTTA GGCTTTTTTAT

TCTAAAT TCGGAAAAATA

TGTCCAAA TGAAAAAAT

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GAM3786 TOB2 3' TACAGATTTGATCAATCTTTTT 85635
                                            A TG
                     TACAGGTTT AT G CTTTTT
                     ATGTCTAAA TA T GAAAAA
                        C GT A
GAM3786 LOC147671 3' TACAGATTTGATCAATCTTTTT 85635
                                              A TG_
                     TACAGGTTT AT G CTTTTT
                     ATGTCTAAA TA T GAAAAA
                        C GTA
GAM3786 LOC150225 3' CAGATTTATGGACTTTTTT 85636
                                            AT _
                     CAGGTTTA TGG CTTTTTT
                     GTCTAAAT ACC GAAAAAA
                          Т
GAM3786 LOC196807 5' GGCCTCTTGGCTTTTTT
                                   85637
                                          AA
                     GGTTT TTGGCTTTTTT
                     CCGGA AACCGAAAAA
                       G_{-}
GAM3787 ADCY6 5' TCCCGCGGTCCTCCGAGCCCGC 85640
                                                GC TC
                     TCCCGCGGTCC CCGG CCCGC
                     AGGGCGCCAGG GGCT GGGCG
                         A_ C_
GAM3787 ATP6V0B 5' TCCCGCAGTCTGTCCGCCCG 85641
                     TCCCGCG GTCCGCCCG
                     AGGGCGT CAGGCGGGC
                        CAGA
                                            C G _ _
GAM3787 BDNF
             5' TCCAGCGCCCAGCCCCGGTCCC 85642
         CG
                      TCC GCG TCC GCCC GGTCCCCG
                     AGG CGC GGG CGGG CCAGGGGC
                      T _ T G
GAM3787 CDKN2C 5' TCTCGCGGTCCCCGGCC
                                    85643 C
                                              GC
                     TC CGCGGTCC CCGGTC
                     AG GCGCCAGG GGCCGG
GAM3787 COL4A1 3' TCCTGCGGTCCATGCGATGCCC 85644
                                            С
                                                 CC _ C
         TGC
                       TCC GCGGTCCG CGGT CCC GC
                     AGG CGCCAGGT GCTA GGG CG
                          AC C A
                      Α
GAM3787 DBN1
             5' CCGCTAGCTCGGTCCCCGC 85645
                                          GGTCC C
                     CCGC GC CGGTCCCCGC
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GGCG CG GCCAGGGGCG
                     AT____ A
GAM3787 DNAJB1 5' TCCTGCGGCCCGCCGACCCGC 85646 C C TC
                   TCC GCGGTCCGCC GG CCCGC
                   AGG CGCCGGGCGG CT GGGCG
GAM3787 FANCC 5' TCCCGCGGTCGCCCGGC 85647
                                          C
                   TCCCGCGGTC GCCCGGT
                   AGGGCGCCAG CGGGCCG
GAM3787 IER5
           3' CCCGCGGTCTCTGGGCGTCCTC 85648
                                           CGCCCG C
        GC
                     CCCGCGGTC GTCC CGC
                   GGGCGCCAG
                               CAGG GCG
                       AGACCCG A
                                           _ CCCGG
GAM3787 IGF2R 3' TCCCGCGGCTCCGTGCTCCCCT 85649
        GC
                     TCCCGCGG TCCG TCCCC GC
                   AGGGCGCC AGGC AGGGG CG
                      G ACG _ A
           5' TCCCCGGTCCGCCGCCGAGC 85650
GAM3787 NMI
                                              G CC
                                         G
        GC
                     TCCC CGGTCCGCCCG TC CGC
                   AGGG GCCAGGCGGC GG GCG
                          _ CTC
                     G
GAM3787 NOTCH4 5' TCTCCAAGCCCCGGTCCC 85651 _ C CCG
                   TC CCG GGT CCCGGTCCC
                   AG GGT TCG GGGCCAGGG
GAM3787 TBX6
            5' CGGCCAGCTGGTCCCCG 85652
                                       C CC
                   CGGTC GC GGTCCCCG
                   GCCGG CG CCAGGGGC
                     T A_
            5' CGGCCAGCTGGTCCCCG 85652
                                       C CC
GAM3787 TBX6
                   CGGTC GC GGTCCCCG
                    GCCGG CG CCAGGGGC
                     ΤА
GAM3787 WBSCR14 5' CCGCAACCGCCTGGTCCCTGC 85653
                                           T C
                                                 C
                   CCGCGG CCGCC GGTCCC GC
                    GGCGTT GGCGG CCAGGG CG
                      _ A A
GAM3787 WBSCR14 5' CCGCAACCGCCTGGTCCCTGC 85653
                                           T C
                   CCGCGG CCGCC GGTCCC GC
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111111 11111 111111 11

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GGCGTT GGCGG CCAGGG CG
A A
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GAM3787 CACNA1H 3' TCTGGCGGGTGCCCGGTCTTCG 85654 CC TCC CC TC GCGG GCCCGGTC CG AG CGCC CGGGCCAG GC AC CA AA GAM3787 CENTG1 3' TCCAGCGGTCCGCCCGGT 85655 TCC GCGGTCCGCCCGGT AGG CGCCAGGCGGCCA Т __ TCCC GAM3787 DIc2 5' CCGCGGTCCGCCCTTGGAGTTT 85656 CGC CCGCGGTCCGCCC GG CGC GGCGCCAGGCGGG CC GCG AA TCAAA TC CC T GAM3787 FLJ11526 5' TCCCGCGGGCTCGCAGGGCCCCG 85657 C TCCCGCGG CGC GG CCCCGC AGGGCGCC GCG CC GGGGCG GA TC _ GAM3787 FLJ11856 5' CGGGAGCCGTCCGGTCCCTGC 85658 C T C С CG GG CCG CCGGTCCC GC GC CC GGC GGCCAGGG CG TC A GAM3787 FLJ12697 3' TCCCGGGCGTGGTCCCCG 85659 C CCGCCC TCCCG GGT GGTCCCCG AGGCCCG CCAGGGC _ CA_ GAM3787 FLJ20694 3' TCCCGCAGTCTTCGAATGTC 85660 CCCG TCCCGCGGTC CG GTC AGGGCGTCAG GC CAG AA TTA GAM3787 FLJ23441 5' TCCCGCGTCCGCCCAGGCCCTC 85661 G CGC TCCCGCG TCCGCCC GGTCC CCGC AGGGCGC AGGCGGG CCGGG GGCG T A GCCC _ GAM3787 FUBP3 5' TCCCCGGTCCGGCCTCCCG 85662 G TCCC CGGTCC GGTC CCCG AGGG GCCAGG CCGG GGGC GAM3787 HSPC003 5' TCCCGCGGGCCGCTGCCCG 85663 T CCGGTC TCCCGCGG CCGC CCCG

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AGGGCGCC GGCG GGGC
                      C AC
GAM3787 KIAA0984 5' ACCGTCCGTCTCGGTCCCCGC 85664 G CC
                   GC GTCCG CGGTCCCCGC
                   TG CAGGC GCCAGGGGCG
                    G AGA
GAM3787 KIAA1623 5' CCCGCGCCCGGCCTCGGTCCTCG 85665
                                           GC_C
        C
                    CCCGCG TC GCC CGGTCC CGC
                   GGGCGC GG CGG GCCAGG GCG
                     CAA
GAM3787 KIAA1754 5' TCCCCGGTCCCGGTCCCCG 85666
                                         G CCG
                   TCCC CGGT CCCGGTCCCCG
                   AGGG GCCA GGGCCAGGGGC
GAM3787 LGI3 5' TCCCGCGGCTGGGCCACCCCGC 85667
                                           CC CGGT
                   TCCCGCGGT GCC CCCCGC
                   AGGGCGCCG CGG GGGGCG
                       ACC T
GAM3787 MGC14425 3' TCCCGCGGCTGCTGCCCCG 85668
                                           CC CCG T
                   TCCCGCGGT GC G CCCCG
                   AGGGCGCCG CG CGGGGC
                       A_ A___
GAM3787 MGC2615 5' TCCCGCGGCCGCCGGCTCCGC 85669
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                   TCCCGCGG CCGCC GGT CCGC
                   AGGGCGCC GGCGG CCG GGCG
                                          C CGCC C
GAM3787 MGC3165 3' CCCCAGGGTCTCGGTTCCCG 85670
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                   GGGGT CCAG GCCA GGGC
                     C A___ A
GAM3787 MGC4607 5' TCCCGCGGCCCGCCCGGCCCGC 85671
                                                TC
                   TCCCGCGGTCCGCCCGG CCCGC
                   AGGGCGCCGGGCGGCC GGGCG
                                             _____ TCC
GAM3787 MO25 5' TCCCGCGGCTGCCGCGCGCGC 85672
                      CGCGGT CCGCC CGG CC
        GGACC
                   GCGCCG GGCGG GCC GG
                      AC CGIIIC CCT
                                85673 G
GAM3787 NPEPL1 3' CCCGGTCCCCTCCCCG
                                         G CGG
                   CC CGGTCC CC TCCCCG
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GG GCCAGG GG AGGGGC

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GAM3787 ODC-p 5' TCCCGCGGCCTGCGCCCCG 85674 C CCG T
                   TCCCGCGGTC GC G CCCCG
                   AGGGCGCCGG CG C GGGGC
GAM3787 PLXNC1 5' TCCCGCGGCCCCCCATCCCCG 85675
                                              G
        С
                    TCCCGCGG CCGCCC GTCCCCGC
                   AGGGCGCC GGCGGG TAGGGGCG
GAM3787 SEMA4B 5' CCCCGCGGTCCGCCCCGAGTC 85676
                   TCCCGCGGTCCGCCC GGTC
                   GGGGCGCCAGGCGGG TCAG
                         GGC
GAM3787 TRAF3 5' TCTCGCGGTCCGTCGCCG 85677 C GCCCG C
                   TC CGCGGTCC GTC CCG
                   AG GCGCCAGG CAG GGC
                    A ____ C
GAM3787 UBAP 5' TCCCAGGCTCGGTCCCCG 85678
                                       C CCGCC
                   TCCCG GGT CGGTCCCCG
                   AGGGT CCG GCCAGGGGC
                     _ A__
GAM3787 VPS4A 5' TCCTGGGTCCGCCCACACCCC 85679 CGC
                                               GGT
        GC
                    TCC GGTCCGCCC CCCCGC
                   AGG CCAGGCGGG GGGGCG
                    AC
                          GTGT
GAM3787 LOC145644 5' TCCCACGGTCTGGGCTCCTGC 85680 CGCCC TC C
                   TCCCGCGGTC GG CC GC
                   AGGGTGCCAG CC GG CG
                       AC___ GA A
GAM3787 LOC148753 5' TCCCGCGGCTGAGCAGCTCCGC 85681
                                            CCGCC CC
                   TCCCGCGGT CGGT CCGC
                   AGGGCGCCG GTCG GGCG
                      ACTC_ A_
GAM3787 LOC158301 3' TCCCCGGTCCGGCCTCCCG 85662
                                         G
                                            GCCC _
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                   AGGG GCCAGG CCGG GGGC
GAM3787 LOC170127 3' TCCCTGGTCTTCCTCCCG 85682
                                        GC CG CGG C
                   TCCC GGTC CC TCCC G
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AGGG CCAG GG AGGG C
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GAM3787 LOC197202 5' TCCAGCGGTCCAGGCTTTTCGC 85683 C CCC CCC
                    TCC GCGGTCCG GGT CGC
                    AGG CGCCAGGT CCG GCG
                         ___ AAAA
GAM3787 LOC201780 5' TCCCGCGGTCGCCGCAGTC 85684
                                             C _
                    TCCCGCGGTC GCC CGGTC
                    AGGGCGCCAG CGG GTCAG
                        С
GAM3787 LOC201931 5' TCCTGCGTCCGCCCCGC 85685 C G
                    TCC GCG TCCGCCC GT
                    AGG CGC AGGCGGG CG
                     A G
                                            C C__ G C
GAM3787 LOC253367 3' CCCGCGGTTCGCTGCGCACTCT 85686
        CCGC
                      CCCGCGGT CGC CG TC CCGC
                    GGGCGCCA GCG GT AG GGCG
                       A ACGC G A
GAM3787 LOC254122 5' TCCCGCAGGTCGTCCCCG 85687
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                    TCCCGC GGTC GTCCCCG
                    AGGGCG CCAG CAGGGGC
                      Т
                                             C _
GAM3787 LOC256160 5' TCCCGCGGTCGCCGCAGTC 85684
                    TCCCGCGGTC GCC CGGTC
                    AGGGCGCCAG CGG GTCAG
                        С
GAM3787 LOC90768 5' TCCCGCGATCTGGCCCTTCTCG 85688
                                            C GG CC
        С
                    TCCCGCGGTC GCCC TC CGC
                    AGGGCGCTAG CGGG AG GCG
                        AC A_ A_
            3' CTTGCAAACGGATCGGGGT 85691
GAM3788 ALS2
                                        AC
                    CTT GT ACGGATCGGGGT
                    GAA CG TGCCTAGCCCCA
                     _ TT
GAM3788 HLA-DQA1 3' TGCCTTAATTGAGGGG
                                 85692
                                          CACG TC
                    TGCCTTAGT GA GGGG
                    ACGGAATTA CT CCCC
                                      C A CGGA
GAM3788 PACE4 3' TGCTTGGCCATCGGGG
                                 85693
                    TGC TT GTCA TCGGGG
```

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ACG AA CGGT AGCCCC
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GAM3788 PACE4 3' TGCTTGGCCATCGGGG
                                 85693 C A CGGA
                    TGC TT GTCA TCGGGG
                    ACG AA CGGT AGCCCC
                     _ C __
GAM3788 PDE4B 5' TGCCTTAGTCATCCCAGGGT 85694
                                            CGGA
                    TGCCTTAGTCA TCGGGGT
                    ACGGAATCAGT GGTCCCA
                        AG
GAM3788 STK6
            3' CCTTAACTGATCGGGG 85695
                                       GTC G
                    CCTTA AC GATCGGGG
                    GGAAT TG CTAGCCCC
                       Α
GAM3788 TCF19 3' TGTCTTGGCCACCAGGG 85696 C A GGAT
                    TG CTT GTCAC CGGGG
                    AC GAA CGGTG GTCCC
                     A C
GAM3788 TCF19 3' TGTCTTGGCCACCAGGG 85696 C A GGAT
                    TG CTT GTCAC CGGGG
                    AC GAA CGGTG GTCCC
                     A C
GAM3788 KIAA0376 3' TGCCTTGGCCACGGAGGGC 85697
                                               TCG
                    TGCCTT GTCACGGA GGGT
                    ACGGAA CGGTGCCT CCCG
                      С
GAM3788 PRO0038 3' TGCCTTAGTCTCCCAGGGT 85698
                                            ACGGA
                    TGCCTTAGTC TCGGGGT
                    ACGGAATCAG GGTCCCA
                        AG___
GAM3788 LOC129198 3' TGCCTTAGTCTGGCTCAG 85699
                                            AC A
                    TGCCTTAGTC GG TCGG
                    ACGGAATCAG CC AGTC
                        A_G
GAM3789 MTMR3 3' TTTATATATTTAACAATTCT 85702
                    TTTATATATTTAATAATTTT
                    AAATATATAAATTGTTAAGA
GAM3789 EDG2
            3' TTTATACATTTCTGCATTTTTC 85703
                                           AATA
                     TTTATATATTT ATTTTTCAA
        AΑ
```

```
GACG
GAM3789 EDG2 3' TTTATACATTTCTGCATTTTTC 85703
                                             AATA
         AΑ
                      TTTATATATTT ATTTTCAA
                     AAATATGTAAA TAAAAAGTT
                         GACG
GAM3789 KIAA0660 3' TTTATACATTTCGATGATTTTT 85704
                                              AATA
         CAA
                      TTTATATATTT ATTTTTCAA
                     AAATATGTAAA TAAAAAGTT
                         GCTAC
GAM3789 MAPKAPK5 3' TTTATACATTAAAGAATAATTT 85705
         TTCAA
                       TTTATATATT AATAATTTTTCAA
                     AAATATGTAA TTATTAAAAAGTT
                         TTTC
GAM3789 MAPKAPK5 3' TTTATACATTAAAGAATAATTT 85705
                                              T__
         TTCAA
                       TTTATATATT AATAATTTTCAA
                     AAATATGTAA TTATTAAAAAGTT
                         TTTC
GAM3790 CUGBP2 3' TGCTATAAGAAGGAAACGT 85708
                                              CC
                     TGCTATAAGAAGG ATGT
                     ACGATATTCTTCC TGCA
                          TT
GAM3790 FLJ14547 5' CGTTGGATCAAGGAGGCCATGT 85709 C CTA A
                     CG TG TAAG AGGCCATGT
                     GC AC GTTC TCCGGTACA
                     A CTA C
GAM3790 FLJ20647 5' TACCAAGGGAAGGCCATGTC 85710
                                            TAA
                     TGCTA GAAGGCCATGTC
                     ATGGT CTTCCGGTACAG
                       TCC
GAM3790 KIAA1136 3' ACTGCTATAATTCTTATGTC 85711
                                             GAAGGCC
                     GCTGCTATAA
                                 ATGTC
                     TGACGATATT
                                 TACAG
                         AAGAA
GAM3790 NSE1
             3' ACTCGCGGGGAAGGCCATGTC 85712
                                           _ TATAA
                     GCT GC GAAGGCCATGTC
                     TGA CG CTTCCGGTACAG
                      G CCC_
GAM3790 LOC123242 5' CATTGCTGAAGGCCATGT 85713 C ATAA
```

CG TGCT GAAGGCCATGT

AAATATGTAAA TAAAAAGTT

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GT ACGA CTTCCGGTACA
GAM3790 LOC148394 3' GCTGCTATGAGAACGGGC 85714
                                           Α
                    GCTGCTAT AGAA GGC
                    CGACGATA TCTT CCG
                       C GC
GAM3790 LOC155060 3' GCTGCTGGCAGGCCATGT 85715
                                          ATAAGA
                    GCTGCT AGGCCATGT
                    CGACGA TCCGGTACA
                      CCG
GAM3790 LOC196955 3' CATTGCTGAAGGCCATGT 85713 C ATAA
                    CG TGCT GAAGGCCATGT
                    GT ACGA CTTCCGGTACA
GAM3790 LOC253001 5' CATTGCTGAAGGCCATGT 85713 C ATAA
                    CG TGCT GAAGGCCATGT
                    GT ACGA CTTCCGGTACA
                     Α ___
GAM3790 LOC254196 3' GCTGCTATGAGAACGGGC 85714
                    GCTGCTAT AGAA GGC
                    CGACGATA TCTT CCG
                       C GC
GAM3791 CHAC
            3' TTCTGGTTTTGTTTTTTTTTT 85718
                                             CT
                    TTCTGGTTTTGTTTTT TTGTT
                    AAGACCAAAACAAAA AACAA
GAM3791 INHBA 3' TACTTTTGTTTTTTTTTTTT 85719 G
                                           С
                    TG TTTTGTTTTT TTTGTT
                    AT AAAACAAAAA AAACAA
                     G
                        Α
GAM3791 PCDH11X 3' TGGTTTTGTTTTTTTTTTTTTTTTT 85720
                                             C_{-}
                    TGGTTTTGTTTT TTTGTT
                    ACCAAAACAAAAA AAACAA
                         AC
GAM3791 PCDH11Y 3' TGGTTTTGTTTTTTTTTTTTTTTTT 85720
                                             C_
                    TGGTTTTGTTTTT TTTGTT
                    ACCAAAACAAAA AAACAA
                         AC
C_{-}
                    TGGTTTTGTTTT TTTGTT
```

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ACCAAAACAAAA AAACAA
GAM3791 RUNX3 3' GTTTTGTTTTTTTTTT 85721
                                             C
                      GTTTTGTTTTT TTTGT
                      CAAAACAAAA AAACA
                          AA
GAM3791 SLC2A8 3' TGGTTTGTTTTTTTTGCT 85722
                                            Т
                                               C
                      TGGTTT GTTTTT TTTGTT
                      ACCAAA CAAAAA AAACGA
GAM3791 FLJ12960 3' TGGTTTTGTTATTGCTGTT 85723
                                              TTTCT
                     TGGTTTTGTT TTGTT
                     ACCAAAACAA
                                  GACAA
                          TAAC_
GAM3791 FLJ20507 3' TTTTTGGTTTTGTTTTCCCTT 85724
                                            C
                      TTT TGGTTTTGTTTTTCTTT
                      AAA ACCAAAACAAAAGGGAA
                       Α
GAM3791 FLJ20507 3' TTTTTGGTTTTGTTTTCCCTT 85724
                                            C
                     TTT TGGTTTTGTTTTTCTTT
                      AAA ACCAAAACAAAAGGGAA
GAM3791 FLJ20507 3' TTTCTGGTTTTTTTGGTTTTGT 85725
                                                GTTTTTC
         Т
                      TTTCTGGTTTT
                                   TTTGTT
                      AAAGACCAAAA
                                   AAACAA
                          AAACCA
GAM3791 FLJ20507 3' TTTCTGGTTTTTTTGGTTTTGT 85725
                                                GTTTTTC
         Т
                      TTTCTGGTTTT
                                   TTTGTT
                      AAAGACCAAAA
                                   AAACAA
                          AAACCA
GAM3791 FLJ21616 3' TGGTTTTTGTCTTTGTT
                                   85726
                                           GTTTT
                      TGGTTTT TCTTTGTT
                      ACCAAAA AGAAACAA
                        AC_
GAM3791 HMP19
              3' TTTTGTTCATGTTCTTTGTT 85727
                     TTTTGTTT TTCTTTGTT
```

TAC
GAM3791 ILF3 3' TAGTTTTGTTTTTCTTTATT 85728
TGGTTTTGTTTTCTTTGTT
|||||||||||||||

AAAACAAG AAGAAACAA

ATCAAAACAAAAAGAAATAA

```
GAM3791 KIAA1595 3' TTTCTGTTTTCTCTCTTTTG 85729
                                             G G
         TT
                      TTTCTG TTTT TTTTTCTTTGTT
                     AAAGAC AAAG GAGAAGAAACAA
                        A A
GAM3791 MKRN4
             3' TTTCCGTTTTTGTTTTTTTTG 85730
                                                  С
                                             G
         TT
                      TTTCTG TTTTGTTTTT TTTGTT
                     AAAGGC AAAACAAAAA AAACAA
                        Α
GAM3791 MOT8
             3' GGTTTTGTCTTTTTTGTT 85731
                                            С
                     GGTTTTGTTTTT TTTGTT
                     CCAAAACAGAAA AAACAA
GAM3791 PP3501 3' TGGTTTTGTTTTGTT 85732
                                              TC
                     TGGTTTTGTTT TTTGTT
                     ACCAAAACAAA AAACAA
                          CA
GAM3791 SPRY4 3' TTTCTGTTTTGTTTTTTT 85733
                                           G
                                                C
                     TTTCTG TTTTGTTTTT TTT
                     AAAGAC AAAACAAAAA AAA
GAM3791 LOC151446 3' TTCTGGTTTTGTTGTGTGCTTT 85734
                                                 TTT
         GTT
                       TTCTGGTTTTGTT CTTTGTT
                     AAGACCAAAACAA GAAACAA
                          CACAC
GAM3791 LOC153320 3' GTTTTGTTTTTTGCT
                                             C
                                   85735
                     GTTTTGTTTTT TTTGTT
                     CAAAACAAAAA AAACGA
GAM3791 LOC157562 5' TTCCTGGTGATGTTTTTTTGTT 85736
                                               TT
                                                    CT
                     TTTCTGGT TGTTTTT TTGTT
                     AAGGACCA ACAAAAA AACAA
                         CT
GAM3791 LOC161823 3' TTTCCGGTTTTTTTGTTTTTTG 85737
                                                    CT
         TT
                      TTTCTGGTTT TGTTTTT TTGTT
                     AAAGGCCAAA ACAAAAA AACAA
                         AΑ
GAM3791 LOC51133 5' GTTTTGTTTTTTTTTTTTT 85738
                                              C_{-}
                     GTTTTGTTTTT TTTGTT
```

CAAAACAAAAA AAACAA

AΑ

| GAM3/91 LOC90410 3' IGG1 | TTTGAGAGGCTTTTTTT 85739 C III |
|---|--|
| GTTA | GTTTT GTTTTTTGTT A |
| | |
| | CAAAA CGAAAA AAACAA T |
| | CTCTC A III |
| GAM3792 FGFRL1 3' TGTCT | GGAAGTGTGTCCA 85742 CGCG CGA |
| | TGTCTGGAG GTG CCA |
| | |
| | ACAGACCTT CAC GGT |
| | CA ACA |
| GAM3792 H1F0 5' GTCTGG | GAGTGCGGCTCCC 85743 C GCGA |
| | GTCTGGAG GCGGT CC |
| | |
| | CAGACCTC CGCCG GG |
| | A AG |
| GAM3792 HNF4A 3' TGTCT | |
| | TGTCTGGA CGC GT GACC |
| | |
| | ACAGACCT GTG TA CTGG |
| | _ G |
| GAM3792 LANCL1 3' TGCTT | GGAGAACTGTGATCAAG 85745 TC C G CGAC |
| | TG TGGAG GC GTG CAAG |
| | |
| | AC ACCTC TG CAC GTTC |
| | GA T A TA |
| [3AM3/92 SH3BP2 3 [[3][]] | |
| artificing of the state of the | GGAATGGGACCA 85746 GCGCG C |
| GANNOTOL GANGER OF PATOL | TGTCTGGA GTG GACCA |
| Grider of Grider Control | TGTCTGGA GTG GACCA |
| Gravior of Grade Control | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT |
| | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C |
| | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ |
| | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG |
| | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG |
| | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C AGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC |
| GAM3792 CYYR1 3' TCTGG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC A_ GAGA |
| GAM3792 CYYR1 3' TCTGG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C AGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC |
| GAM3792 CYYR1 3' TCTGG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC A_ GAGA GGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA |
| GAM3792 CYYR1 3' TCTGG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC A_ GAGA GGAGCATCTGGCCAA 85748 T C TGCGA |
| GAM3792 CYYR1 3' TCTGG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC A_ GAGA TGGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C AGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC GAGA TGGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA AC GACCTCGT CC GGTT |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC A_ GAGA TGCTGGAGCG GG CCAA AC GACCTCGT CC GGTT AGA |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC GAGA TGGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA AC GACCTCGT CC GGTT AGA TGCGGTGCGGTGGAACA 85749 GAGC C C |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC GAGA GGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA AC GACCTCGT CC GGTT AGA GCGGTGCGGTGGAACA 85749 GAGC C C TGTCTG GCGGTG GA CA |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC A_ GAGA TGGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA AC GACCTCGT CC GGTT AGA TGCGGTGCGGTGGAACA 85749 GAGC C C TGTCTG GCGGTG GA CA |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT GAM3792 KIAA1128 3' TGTCT GAM3792 LIG-1 5' TGTCTG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC GAGA TGGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA AC GACCTCGT CC GGTT AGA TGCGGTGCGGTGGAACA 85749 GAGC C C TGTCTG GCGGTG GA CA |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT GAM3792 KIAA1128 3' TGTCT | TGTCTGGA GTG GACCA |
| GAM3792 CYYR1 3' TCTGG GAM3792 HSD17B12 3' TGCT GAM3792 KIAA1128 3' TGTCT GAM3792 LIG-1 5' TGTCTG | TGTCTGGA GTG GACCA ACAGACCT TAC CTGGT C GAGCGTGTCTCTACCAAG 85747 CG GCG_ TCTGGAGCG GT ACCAAG AGACCTCGC CA TGGTTC GAGA TGGAGCATCTGGCCAA 85748 T C TGCGA TG CTGGAGCG GG CCAA AC GACCTCGT CC GGTT AGA TGCGGTGCGGTGGAACA 85749 GAGC C C TGTCTG GCGGTG GA CA |

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ACAGACCTCGCGC ACGCT GG
                         G TGA
GAM3792 PL6 3' TGTCTGGAGTTGGAACCA 85751
                                         CGC TGC
                    TGTCTGGAG GG GACCA
                    ACAGACCTC CC TTGGT
                        AA_ _
GAM3792 LOC115219 5' TGTCTGGACTGTGGTTCACC 85752
                                            G GC_ GCG
                    TGTCTGGA C GGT ACC
                    ACAGACCT G CCA TGG
                       ACA AG
GAM3792 LOC151996 5' TGTCTGGAGGGGTATGGGCC 85753
                                             CGC CGA
                    TGTCTGGAG GGTG CC
                    ACAGACCTC CCAT GG
                        C ACCC
GAM3792 LOC167040 5' TGTCTGGAGCAGTGGCCA 85754
                                            GC CGA
                    TGTCTGGAGC GGTG CCA
                    ACAGACCTCG TCAC GGT
                        __ C__
GAM3792 LOC253150 5' TGCCTGGAGCACCCTTGGC 85755
                    TGTCTGGAGCGC GGT
                    ACGGACCTCGTG CCG
                         GGAA
GAM3793 TRPM6 3' TATAATATATATATCCATATA 85758
                                          CG
                                               ΑT
                      TATAA TATATATTC TATATT
        TATT
                    ATATT ATATAAG ATATAA
                      AΤ
                           GTAT
GAM3793 LOC138399 3' TATAAAGTATATCCAT 85759
                                         С
                    TATAA GTATATATTCAT
                    ATATT CATATATAGGTA
                      Т
GAM3793 LOC145868 5' TATAACATATATCTCATATT 85760
                                               CA
                    TATAACGTATATATT TTATATT
                    ATATTGTATATAG AGTATAA
```

AC GACCACCT CT CCCCG

A CC_ CCC

GAM3794 ACP1 5' TACCTATAGGGGACGGGGC 85764 GT_ AAGAA

TGCCTG GGGA CGGGGC

|||||| |||| |||||

TG CTGGTGGG GA GGGGC

AAA AC_

GAM3794 ACCN2 3' TGTCTGGTGGAGGGGGGGGGGG 85763 C

С

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ATGGAT CCCT GCCCCG
                      ATC
GAM3794 ACP1 5' TACCTATAGGGGACGGGC 85764
                                       GT AAGAA
                   TGCCTG GGGA CGGGGC
                   ATGGAT CCCT GCCCCG
                      ATC
GAM3794 ALX3 3' TGCTGGTGGGGAGGGAAGCAG 85765
                                            AAA__ _
                                         С
        GGC
                     TGC TGGTGGG GAA CGGGGC
                   ACG ACCACCC CTT GTCCCG
                        CTCCC C
GAM3794 BCL2A1 5' TGCCTGGTGGAGAGCAAAG 85766
                                          GAA A
                   TGCCTGGTGG AGA CGGGG
                   ACGGACCACC TCT GTTTC
                        С
GAM3794 CDY1 5' TGCCTGGTGGGACAGCTTGGGC 85767
                                            A AACG
                   TGCCTGGTGGGA AG GGGC
                   ACGGACCACCCT TC CCCG
                        G GAA
GAM3794 CDY1 5' TGCCTGGTGGGACAGCTTGGGC 85767
                                            A AACG
                   TGCCTGGTGGGA AG GGGC
                   ACGGACCACCCT TC CCCG
                        G GAA
GAM3794 CDY2 5' TGCCTGGTGGGACAGCTTGGGC 85767
                                            A AACG
                   TGCCTGGTGGGA AG GGGC
                   ACGGACCACCCT TC CCCG
                        G GAA
GAM3794 DVL3 3' TGCCTGATGGGGTGGGG
                               85768
                                         AAAGAAC
                   TGCCTGGTGGG GGGG
                   ACGGACTACCC
                                CCCC
                       CA___
GAM3794 EFNA3 3' GCCTGGTGGGGAAGGGG 85769
                                         AAA C
                   GCCTGGTGGG GAA GGGG
                   CGGACCACCC CTT CCCC
GAM3794 FGF23 3' CTGCTTGGGAACAGAGTGGGGC 85770
                                         G_ _ AC
        C
                    CTG TGGGAA AGA GGGGCC
                   GAC ACCCTT TCT CCCCGG
                    GA G CA
GAM3794 FGFR1 3' TGCCTGGTGGCAGGGAGGGG 85771
                                           GAAA AC
                   TGCCTGGTGG GA GGGG
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ACGGACCACC CT CCCC
                       GTCC __
GAM3794 FGFR1 3' TGCCTGGTGGCAGGGAGGGG 85771 GAAA AC
                   TGCCTGGTGG GA GGGG
                   ACGGACCACC CT CCCC
                       GTCC __
GAM3794 FLRT2 3' CCTGGTGGGGAAGGAA
                                85772
                                       AAA C
                   CCTGGTGGG GAA GGGG
                   GGACCACCC CTT CCTT
GAM3794 GBF1
            3' GCCTGGTGGGAAGCACTGG 85773
                                          AGA G
                   GCCTGGTGGGAA AC GG
                   CGGACCACCCTT TG CC
                        CG A
GAM3794 HD 3' TGTCTGCTGGGAAGGATGC 85774 C G AGAAC
                   TG CTG TGGGAA GGG GC
                   AC GAC ACCCTT CCT CG
                    A G ____ A
GAM3794 HMGCL 3' TGCTAAGTAGGGAACGGGG 85775
                                        CT AAA
                   TGC GGTGGG GAACGGGG
                   ACG TCATCC CTTGCCCC
                    ΑT
GAM3794 IL1R1 3' TGCTGGTGGGAAAGCATGGGC 85776 C
                                             AACG
                   TGC TGGTGGGAAAG GGGC
                   ACG ACCACCCTTTC CCCG
                         GTA_
GAM3794 PACE 5' TGACTGGTGGGGCATGGGGCC 85777 C AAAGAAC
                   TG CTGGTGGG GGGGCC
                   AC GACCACCC
                                CCCCGG
                    Т
                        CCGTA
GAM3794 PELO
            5' TGCCTGGCGGGAAGGAAACACG 85778
                                           A GG
        С
                    TGCCTGGTGGGAA GAACG GC
                   ACGGACCGCCCTT TTTGT CG
                        CC G
GAM3794 PSEN1 3' TGCTTGTGTGGGAGAGAAGAA 85779 C _ A C
                   TGC TG GTGGGA AGAA GGG
                   ACG AC CACCCT TCTT CTT
                    ΑА
                        C _
GAM3794 PSEN1 3' TGCTTGTGTGGGAGAGAAGAA 85779 C _ A C
                   TGC TG GTGGGA AGAA GGG
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ACG AC CACCCT TCTT CTT
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GAM3794 RFX1 3' TGGTGGGAGGACGGGG
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                                85780
                    TGGTGGGA G ACGGGG
                    ACCACCCT C TGCCCC
                       __ C
GAM3794 SHC1 3' GCCTGGCCGGGAGTGGGGC 85781
                                          AAGAAC
                    GCCTGGT GGGA GGGGC
                    CGGACCG CCCT
                                 CCCCG
                      G CA
GAM3794 SORBS1 3' TGTCTGGTGGGGGATGGGA 85782 C
                                            AAA AC
                    TG CTGGTGGG GA GGGG
                    AC GACCACCC CT CCCT
                        C A
GAM3794 TCF7 3' CTGTCATCGGAAGGAACGGGGC 85783 __ G A
                    CTG GT GGAA GAACGGGGC
                    GAC TA CCTT CTTGCCCCG
                     AG G C
GAM3794 TFE3
            3' TGCCTGATTACAGGGGTGGGGC 85784
                                           AAAGAAC
                    GCCTGGT GGG GGGGCC
        С
                    CGGACTA CCC
                                 CCCCGG
                      ATGT CA
GAM3794 THBD
            5' TGCCTGGTGGGAAGGG
                                         AAGAAC
                                85785
                    TGCCTGGTGGGA GGGG
                    ACGGACCACCCT TCCC
GAM3794 TNR
           3' CCTTGGTGGGAAAGGAGG 85786
                                           AAC
                    CCT GGTGGGAAAG GGGG
                    GGA CCACCCTTTC CTCC
                     Α
GAM3794 UPF3B 5' GCTTGGCCGGAACGGGG
                                 85787 C G AAGA
                    GC TGGT GGA ACGGGG
                    CG ACCG CCT TGCCCC
                    A G _
GAM3794 UPF3B 5' GCTTGGCCGGAACGGGG 85787 C G AAGA
                    GC TGGT GGA ACGGGG
                    CG ACCG CCT TGCCCC
                    \mathsf{A} \mathsf{G}
GAM3794 ALTE
            3' TGCCTGGAGCTGAGTGGGG 85788
                                         TG AAA AC
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TGCCTGG GG GA GGGG

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__ GA_ CA
GAM3794 ARHGDIG 3' TGCCGGCAAAGGGTGGGGC 85789 TGGT G AAC
                   TGCC GG AAAG GGGGC
                   ACGG CCTTTC CCCCG
                      G CCA
GAM3794 C1orf2 5' GCCTGGTGGGGAGAGGC
                                85790
                                        AAA AC
                   GCCTGGTGGG GA GGGGC
                   CGGACCACCC CT CTCCG
GAM3794 C1orf2 5' GCCTGGTGGGGAGAGGC 85790
                                         AAA AC
                   GCCTGGTGGG GA GGGGC
                   CGGACCACCC CT CTCCG
GAM3794 C20orf29 3' TGCCTGGTGGGAACGGG 85791
                                         AAGA
                   TGCCTGGTGGGA ACGGG
                   ACGGACCACCCT TGCCC
GAM3794 DJ37E16.5 3' ACCAGGAAAGGGTGGGGC 85792
                                        TGGT AAC
                   GCC GGGAAAG GGGGC
                   TGG TCCTTTC CCCCG
                          CCA
GAM3794 DKFZP434J193 5' TGTCTGGTGGGATGGGC 85793 C
                                             AAGAACG
                   TG CTGGTGGGA GGGC
                   AC GACCACCCT
                                CCCG
                    Α
                        Α
GAM3794 DKFZP586G1122 3' TGACTGGTGGGAGGGGAC 85794 C
                                                AAGAAC
                   TG CTGGTGGGA GGGGC
                   AC GACCACCCT
                                CCCTG
                    Т
                        C____
                                     85795 T GAAAGA
GAM3794 DKFZP761D0211 3' TGCCTGGGGCACGGGG
                   TGCCTGG GG ACGGGG
                   ACGGACC CC
                              TGCCCC
                      _ G_
GAM3794 DNAJA3 3' TGCTGGTGGGGCCTGGGGGCC 85796 C
                                             AAAGAAC
                   TGC TGGTGGG
                                GGGGCC
                   ACG ACCACCC
                                CCCCGG
                        CGGAC__
GAM3794 FLJ12660 3' TGCCTGGTGGGAAGGC
                                85797
                                         AAGAACG
```

TGCCTGGTGGGA GGGC

ACGGACC TC CT CCCC

```
ACGGACCACCCT
                                  TCCG
GAM3794 FLJ13102 3' TGTGTGGTGGGAGAGGG 85798 CC
                                            AA AC
                    TG TGGTGGGA GA GGG
                    AC ACCACCCT CT CCC
                    AC
GAM3794 FLJ14810 3' GCCTGGTAGGATGGGGC
                                  85799
                                           AAGAAC
                    GCCTGGTGGGA
                                 GGGGC
                    | | | | | |
                    CGGACCATCCT
                                 CCCCG
GAM3794 FLJ31978 3' TGTCTGATGAGGCGGGC 85800
                                            AAAGAA
                    TG CTGGTGGG
                                CGGGGC
                    AC GACTACTC
                                GCCCCG
                        С
GAM3794 H-L(3)MBT 3' TGCCTGGTGGGGCAACACGGG 85801
                                             AA A
                    TGCCTGGTGGG AG ACGGG
                    ACGGACCACCC TT TGCCC
                        CG G
GAM3794 HCGIV.9 5' CCTGGCGAGGGCGGGC
                                          AAAGAA
                                  85802
                    CCTGGTGGG CGGGGC
                    GGACCGCTC
                               GCCCCG
                       CC
GAM3794 HYA22 5' GCCTGGTGGGGGAGAGGGGAGC 85803
                                           AA A
                                                     Ш
                        GTGGG AGA CGGGGCC G
        GGGGCCG
                    CACCC TCT
                              GCCCCGG C
                      CC CCCCTC
                                 Ш
GAM3794 IMAGE3451454 3' TGTCTGGATGGAAACGGGGCC 85804 C AAGA
                    TG CTGG TGGGA ACGGGGCC
                    AC GACC ACCTT TGCCCCGG
                    А Т
           3' TGCCTGGTGCGGGGACTCTGGG 85805
GAM3794 IRF7
                                            ___ AAGAAC
        GCC
                      TGCCTGGT GGGA GGGGCC
                    ACGGACCA CCCT
                                   CCCCGG
                       CGC GAGA
GAM3794 KIAA0053 3' CCTGGTGGGGTGGCAGAATGGG 85806
                                             AA___ C
                    CCTGGTGGG AGAA GGGG
        G
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GGACCACCC TCTT CCCC

GCCTGGT GGGA GGGGCC

AAGAAC

CACCG A

GAM3794 KIAA0082 3' GCCTGGCACTGGGATGGGGCC 85807

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CGGACCG CCCT
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                       TGA A__
GAM3794 KIAA0326 3' TGCCTGGTGTGGGGAGAAC 85808
                                             _ AA
                    TGCCTGGTG GG AGAAC
                     ACGGACCAC CC TCTTG
                        A CC
GAM3794 KIAA0513 5' TGCCTGGAGGGGAGGC
                                   85809
                                          T AAAGAAC
                    TGCCTGG GGG
                                  GGGGC
                     ACGGACC CCC
                                  CTCCG
                       Т
GAM3794 KIAA0513 3' CTGGTGGGGAAGGGGC
                                   85810
                                           AAA C
                     CTGGTGGG GAA GGGGC
                     GACCACCC CTT CCCCG
GAM3794 KIAA0773 3' TGTGTGGTGGGGGGGGGGGC 85811 CC
                                                AA AAC
                    TG TGGTGGG AG GGGGC
                     AC ACCACCC TC CCCTG
                     AC
                          CC ___
GAM3794 KIAA1322 3' TGCCTGGCGGGAGAGGC
                                             AAGAAC
                                   85812
                    TGCCTGGTGGGA
                                   GGGGC
                     ACGGACCGCCCT
                                   CTCCG
GAM3794 KIAA1530 5' TGCCTGGTGGGATGAGGCGAGG 85813
                                                AAGAA
        GCC
                      TGCCTGGTGGGA CG GGGCC
                     ACGGACCACCCT GC CCCGG
                         ACTCC T
GAM3794 KIAA1872 3' CCTTGGTGGGAGGTATTGACGG 85814
                                                AAGA
        GG
                      CCT GGTGGGA
                                  ACGGGG
                     GGA CCACCCT
                                  TGCCCC
                      Α
                         CCATAAC
GAM3794 KIAA1908 5' TGCCTGGCGGGGGGGGGGGGGGG 85815
                                                AA AA
        C
                     TGCCTGGTGGG AG CGGGGCC
                     ACGGACCGCCC TC GCTCCGG
                         C \subset CC
GAM3794 LNIR
            3' TGCATGGTGGGAGAGA
                                 85816 C
                                           AAGAAC
                    TGC TGGTGGGA
                                  GGGG
                     ACG ACCACCCT
                                  CTCT
                      Т
GAM3794 MAD4
             3' TGCTGGTGGGAAGGCC 85817
                                            С
                                                A AA
                    TGC TGGTGGGAA G CGGGGCC
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ACG ACCACCCTT C GTTCCGG
                         _ CC
GAM3794 MMS19L 3' TGTCTGTGGGAAAGGCAG 85818 C G
                                             AA
                   TG CTG TGGGAAAG CGG
                   AC GAC ACCCTTTC GTC
                         C_
                    Α _
GAM3794 NTN4 5' CCTCGGGAGGGAACGGGGCC 85819
                                         GG AA
                    CCT TGGGA GAACGGGCC
                    GGA GCCCT CTTGCCCCGG
                     CC
GAM3794 PP1628 3' TGCTGGTGGGGGAAGG 85820
                                      С
                                          AAA ACG
                   TGC TGGTGGG GA GGG
                    ACG ACCACCC CT TCC
                        С
GAM3794 R32184 3 3' GCACACGCGGGGAGGGCGGGGC 85821 CTG AA AA
        C
                    GC GTGGG AG CGGGGCC
                    CG CGCCC TC GCCCCGG
                    TGTG C_ CC
                                          C T AAGAAC
GAM3794 SIMRP7 3' TGCTGGAACAGGGAGTGGGGC 85822
                   TGC TGG GGGA GGGGC
                    ACG ACC CCCT
                                 CCCCG
                     _ TTGT CA_
GAM3794 SNURF 3' TGCCTGGTGGAGGGG
                                         AAAGAAC
                                85823
                   TGCCTGGTGGG
                                 GGGG
                    ACGGACCACCT
                                 CCCC
GAM3794 TNFAIP3 3' TGCTTGGTAGGAGGAGGAGGAAC 85824 C
                                              A AAC
        С
                    TGC TGGTGGGA AG GGGGCC
                    ACG ACCATCCT TC CCTTGG
                     Α
                        C CT
GAM3794 UBCE7IP5 3' TGCTGGTGGGAAGCAGG 85825 C
                                            AGAA
                    TGC TGGTGGGAA CGGG
                    ACG ACCACCCTT GTCC
                         C__
GAM3794 LOC142913 5' TGCCTGGTGTGGGGGTGC 85826
                                           _ AAAGAAC _
                   TGCCTGGTG GG
                                 GGG GC
                    ACGGACCAC CC
                                 CCC CG
GAM3794 LOC144289 3' TGCCTGGTGGAAAGAGGAA 85827
                                            G AC
                   TGCCTGGTGG AAAGA GGGG
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ACGGACCACC TTTCT CCTT

GAM3794 LOC146988 3' CCTGGTGGGGGAGAGGAGAGGC 85828 AA AC CCTGGTGGG AGA GGGGC GGACCACCC TCT CTCCG CC CCT GAM3794 LOC155376 5' CTGGTGGGAGAGGGA 85829 AA AC CTGGTGGGA GA GGGG GACCACCCT CT CCCT GAM3794 LOC158158 5' GCCCTCCCTGGAAGGACGGGGC 85830 GGTG A A C GCCT GGAA GA CGGGGCC CGGG CCTT CT GCCCCGG AGGGA C GAM3794 LOC164714 3' TGCCGGTGGGAGGCCCTGGCC 85831 T AAGAACGG TGCC GGTGGGA GGCC IIII ACGG CCACCCT CCGG CCGGGA GAM3794 LOC199986 3' TGGGTGCTGGGAAGGAACGGGG 85832 CC G A C TG TG TGGGAA GAACGGGGC AC ACCCTT CTTGCCCCG CC G C GAM3794 LOC199989 3' TGCAGCGGGAGGGGCGGGCC 85833 CT AAGAA TGC GGTGGGA CGGGGCC ACG TCGCCCT GCCCCGG CCCC_ GAM3794 LOC203611 5' TGCCTGGTGGGACAGCTTGGGC 85767 A AACG TGCCTGGTGGGA AG GGGC ACGGACCACCCT TC CCCG G GAA GAM3794 LOC204820 3' TGCCTGGTGGGCAGGGAGGCC 85834 AAAGAAC TGCCTGGTGGG GGGGCC ACGGACCACCC **CTCCGG** GTCC___ GAM3794 LOC221849 5' TGCCGGTGGGGAAGCCAAAGGC 85835 T A AAC TGCC GGTGGG AAG GGGGC

GAM3794 LOC253532 5' CTGGTGGGAGAGGGA 85829 AA AC CTGGTGGGA GA GGGG

_ C GGT

ACGG CCACCC TTC TTCCG

GACCACCCT CT CCCT

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GAM3794 LOC254099 5' TGTCTGGTGGGTGGGAGGC 85836 C AAAGAAC
                    TG CTGGTGGG GGGGC
                    AC GACCACCC
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                         ACC
GAM3794 LOC254875 5' CTGGTGGGAGAGGGA
                                  85829
                                           AA AC
                    CTGGTGGGA GA GGGG
                    11111111 11 1111
                    GACCACCCT CT CCCT
GAM3794 LOC256158 5' TGCTGGTGGGGAGCAGGGC 85837
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                    TGC TGGTGGG GA CGGGGC
                    ACG ACCACCC CT GTCCCG
                         С
GAM3794 LOC91050 3' GCCTGGTGGGGAGGGC 85838
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                        C___
GAM3795 LOC204010 3' TATTTTCTGTCAACCTTATTT 85841
                    TATT TTT TCAACCTTATTT
                    ATAA AGA AGTTGGAATAAA
                      A C
GAM3796 IKBKB 3' GCAGTGCCCACGGAGGGCTGC 85844
                                               TGT
                    GCA CCCGCG AGGGCTGC
                    CGT GGGTGC TCCCGACG
                     CAC C
            3' CCCCTGCAGGCTGCAT
                                      GCG G
GAM3796 JPH2
                                85845
                    CCC TGTAGG CTGCAT
                    GGG ACGTCC GACGTA
                     G__ _
             3' GCAGCCCAAAGCAGGGCTGC 85846
GAM3796 MMP2
                                          _ CGT
                    GCA CCCG GTAGGGCTGC
                    CGT GGGT CGTCCCGACG
                     C TT_
GAM3796 ARHGEF11 3' GCGTGCGCGTGTACACACAT 85847 ACC
                                                 GG T
                    GC CGCGTGTA GC GCAT
                    CG GCGCACAT TG TGTA
                           G_ _
                     CAC
GAM3796 BAIAP1 5' GCGCCCGCGAGCTTTGTTTGCA 85848 A T AGGGC_
        Т
                     GC CCCGCG GT TGCAT
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C T AAACAA
GAM3796 DKFZP434K1772 5' GCACCCGCGGCACAGCTGC 85849 T G
                    GCACCCGCG GTA GGCTGC
                    CGTGGGCGC CGT TCGACG
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GAM3796 DKFZP564C196 3' CCTATGAGGGCTGCAT 85850 GC T
                    CC GTG AGGGCTGCAT
                    GG TAC TCCCGACGTA
                    Α
GAM3796 FLJ10079 3' GCCCCTCAGGGCTGCAT 85851 A GCGTG
                    GC CCC TAGGGCTGCAT
                    CG GGG GTCCCGACGTA
                    Α
GAM3796 FLJ11362 5' AAGCCTCATGCAGGGCTG 85852
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                    AAGC CGTGTAGGGCTG
                    TTCG GTACGTCCCGAC
                     GA
GAM3796 FLJ31528 3' GCTTCGTGTGTAGGAAGCA 85853 ACC C
                                             CT
                    GC CG GTGTAGGG GCA
                    CG GC CACATCCT CGT
                    AA A
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GAM3796 KIAA0544 3' GCACCTCCCAGCAGGCTGCAT 85854
                                          CGCGT G
                    GCACC GTAGG CTGCAT
                    CGTGG CGTCC GACGTA
                      AGGGT
                                85855 C GCGTGT
GAM3796 KIAA1155 3' AAGACCCAGGGCTGC
                    AAG ACCC AGGGCTGC
                    TTC TGGG TCCCGACG
GAM3796 PEPP3 3' AAGCATCTCCACTGAGGCTGCA 85856 C_ G TA
                    AAGCA CCGC TG GGGCTGCAT
                    TTCGT GGTG AC TCCGACGTA
                     AGA _ _
GAM3796 SFRS12 5' ACCGTTCGTGTTGGCTGCAT 85857 CG_ AG
                    ACC CGTGT GGCTGCAT
                    TGG GCACA CCGACGTA
                     CAA A_
                                            CCCGC AGG _
GAM3796 LOC122792 3' AAGCATGTGTGTGCGCGCGC 85858
        ΑT
                    AAGCA GTGT GC TGCAT
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CG GGGCGC CG ACGTA

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TTCGT CACA CG GCGTA
                      ACACA CG C
GAM3796 LOC144893 5' GCATCCCTGCATGGCTGC 85859 GCG G
                    GCA CCC TGTA GGCTGC
                    CGT GGG ACGT CCGACG
                     Α ___ Α
GAM3796 LOC146795 3' AAGACCTGCACAGGTTGCA 85860 C CGC TG GC
                    AAG ACC G TAGG TGCA
                    TTC TGG C GTCC ACGT
                     A GT A
GAM3796 LOC206360 5' CCACCTGAGAGGGCTGCAT 85861
                                          GΤ
                    CCGC TG AGGGCTGCAT
                    GGTG AC TCCCGACGTA
                     G TC
GAM3796 LOC253289 3' GCCCCTCCCCAGGGCTGCAT 85862 A GCGTG
                    GC CCC TAGGGCTGCAT
                    CG GGG GTCCCGACGTA
                    _ AGGG_
GAM3796 LOC91548 3' ACGTGTCTGGGGGCTGCAT 85863
                    GCGTGT GGGCTGCAT
                    TGCACA CCCGACGTA
                      GACC
GAM3796 LOC91917 3' GCAGTACCTGAACTGGGCTGCA 85864 CCC G TA
        Т
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                    CGT TG AC CCCGACGTA
                     CA_ G TTGA
GAM3797 CKB
            3' TAGTTTATTTCAGCATCA 85867
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                    TAGTTTATTTCA TATCA
                    ATCAAATAAAGT GTAGT
                        C____
GAM3797 MAIL 3' TAGTTTATTTAAAACCATCAG 85868
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                    TAGTTTATTT GATTATCAG
                    ATCAAATAAA TTGGTAGTC
                        TT__
GAM3798 CYP1A1 3' TAGAGAAGGGAGACCAA 85871
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GAM3798 HDGF 3' TAGAGAGGCATAGAGAGACCA 85872
                                          AC A
                    TAGAGG GCA AGAGAGACCA
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ATCTCT CGT TCTCTCTGGT
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GAM3798 POLG 5' GAAGACGTGGAGAGAGAC 85873
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                       ACC
GAM3798 ARS2 5' TAGAGGACCGAAGAGA 85874
                                          GCA
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                     ATCTCCTG TTCTCTC
                        GC
GAM3798 FLJ12688 3' TAGAGGACAGTGAAAAA 85875
                                           CAAA
                    TAGAGGACG GAGAGA
                    ATCTCCTGT CTTTTT
                        CA
GAM3798 KIAA0469 3' GAGGACGCAAGAGCCA 85876
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                    GAGGACGCA AGAG CCA
                     CTCCTGCGT TCTC GGT
GAM3798 RLUCL 3' CAGAGGACGCAGGGACCA 85877
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                    TAGAGGACGCA G GACCA
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GAM3798 LOC120071 3' GGGGCAGAGAGACCA 85878 AC A
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                     CC CGT TCTCTCTGGT
                     C_{-} C
GAM3798 LOC143287 3' TAGGGGGCGCAAAGAAGAAGA 85879
                    TAG GG CGCAAAGA GAGA
                     ATC CC GCGTTTCT CTCT
                      C
                           Т
GAM3798 LOC146328 5' GAGGCGCAGAGAGAC
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                                         A AA
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                     CTCC GCGT CTCTCTG
GAM3798 LOC220018 5' GGAGGCAGAGACCA
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                                          C AA
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                     111 111 111111111
                     CCT CGT CTCTCTGGT
                      С
GAM3799 ACHE
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                                               CA
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AGA AGGAGGAGAAA AGAA

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TCT TCCTCCTCTTT TCTT
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GAM3799 ADD1 3' AAAGGAGGGGATAAAGGAAGA 85885
                                           A AACAA
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                    TTTCCTCC CT CTTCT
                        C ATTTC
GAM3799 ADD1
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                                            A AACAA
                    GAAGGAGG GA GAAGA
                    TTTCCTCC CT CTTCT
                        C ATTTC
GAM3799 AP1M1
            3' GAAGGAAGACAAGAAG
                                  85886
                                          GAAA
                    GAAGGAGGA CAAGAAG
                    CTTCCTTCT GTTCTTC
GAM3799 ARPC2 5' AGGGGAAGGAAACAAG 85887
                                         AA
                    AG GGAGGAGAAACAAG
                    TC CTTCCTCTTTGTTC
                     CC
GAM3799 ASTN
            3' AGAAGGAGAGGTACAGAGGA 85889
                                             G AAACA A
                    AGAAGGAG AGA GA
                    TCTTCCTC TCT CT
                        _ CCATG C
GAM3799 ASTN
            3' GAAAGAGGGCCAAAAAA 85888
                                            AAA
                    GAAGGAGGAG CAAGAAG
                    CTTTCTCCTC GTTTTTT
                        CG_
GAM3799 BAZ1B 3' AGAAGGGGAGATTCAGGAA 85890
                                           A AA A
                    AGAAGG GGAGA CA GAA
                    TCTTCC CCTCT GT CTT
                       _ AA C
            3' GAGGAGGAGGAACAGAA
GAM3799 BGN
                                  85891
                                           A A
                    GA GGAGGAG AACA GAA
                     11 1111111 1111 111
                     CT CCTCCTC TTGT CTT
                         C _
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|| |||||||| |||| TC TCCTCCTCT CTTC C C___ GAM3799 CANX 3' GAGGGAGAAGAAATCACAGA 85893 A _ _ _ GA GGAGGAGAAA CA AGA

AG AGGAGGAGA GAAG

85892 A

AACAA

5' AGGAGGAGGAGGAAG

GAM3799 BIG1

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CT CCTCTTCTTT GT TCT
                     C
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                                              A___ A A
GAM3799 CAPN1 3' GGAGGAGAGGGGACAGGAGGA 85894
                     GGAGGAGA ACA GA GA
                    CCTCCTCT TGT CT CT
                        CCCC C C
GAM3799 CARPX 3' AGAAGGAGAGAAGCAAGAAG 85895
                                               Α
                    AGAAGGAG GAGAA CAAGAAG
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                        T C
GAM3799 CHST6 3' AGAGGAGGAGGGCAAGA 85896
                                             AAA
                    AGA GGAGGAG CAAGA
                     TCT CCTCCTC GTTCT
                         CCC
GAM3799 CKTSF1B1 3' AGGAGGAGGAGGAAAGGAG 85897 A
                                               CA
                    AG AGGAGGAG AAA AG
                    TC TCCTCCTC TTT TC
                     С
                         C CC
GAM3799 CORT
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                         CCT
GAM3799 CTF1
            3' GAAGGAGGAGAGAAAA 85899
                                             _ AA
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                     CTTCCTCC TCT GTTCTTTT
                        \mathsf{C}
GAM3799 CX3CR1 3' GAAGGAGGAGGCAATGGGGAAT 85900
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                    GAAGGAGGAG CAA GAAT
                     CTTCCTCCTC GTT CTTA
                         C__ ACCC
GAM3799 DACH
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                                              ACA
                    AGA GGAGGAGAA AGA
                     TCT CCTCCTCTT TCT
                      G
                          CGC
GAM3799 DACH
             5' AGAAGGGGAGAAAAGGAG 85902
                                               CA A
```

C __ C
GAM3799 DDX20 5' AGAGGGAGGAGGAAAGA 85903 A AAC
AGA GGAGGAGA AAGA
||| |||||||| ||||

AGAAGG GGAGAAA AG AG

TCTTCC CCTCTTT TC TC

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TCT CCTCCTCT TTCT
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GAM3799 DLG5 3' AGATGGAGGAGAAACGAGA 85904
                                          Α
                                                Α
                     AGA GGAGGAGAAAC AGA
                     TCT CCTCCTCTTTG TCT
                      Α
                            C
GAM3799 DNM2
             3' AGGAGGAGGAGGAGGAA 85905 A
                                                 AAACA A
         Т
                      AG AGGAGGAG AGA GAAT
                     TC TCCTCCTC TCT CTTA
                          CTCC C
                      С
GAM3799 DSC1
             5' AGTAGGAGGAGCAACGGGAGAA 85906 A
                                                 A AA A
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                     TC TCCTCCTC TTG CT CTTA
                          G CC
GAM3799 DSC1
             5' AGTAGGAGGAGCAACGGGAGAA 85906 A
                                                A AA A
         Т
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                     TC TCCTCCTC TTG CT CTTA
                      Α
                          G CC _
GAM3799 DYRK1B 3' AAAAGGGGGAGAGGGCCCAAG 85907
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                     AGAAGG GGAGA
                                   CAAG
                     TTTTCC CCTCT
                                   GTTC
                        C CCCCGG
GAM3799 EN2
            3' AGGAGGAGGAGAAGA 85908 A
                                             AAACA
                     AG AGGAGGAG
                                  AGAAGA
                     TC TCCTCCTC TCTTCT
                      С
                          С
GAM3799 EN2
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                                   GAAG
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                                  CTTC
                          CTC
GAM3799 ESRRG 3' GAAGGATGAGAAAAGAGAGGAA 85910
                                              G
                                                  CA A
         Т
                      GAAGGA GAGAAA AGA GAAT
                     CTTCCT CTCTTT TCT CTTA
                           TC C
                        Α
GAM3799 EXTL2 3' AGAAGGAAGAGAGAAG
                                   85911
                                             AAACA
                     AGAAGGAGGAG
                                   AGAAG
                     TCTTCCTTCTC
                                  TCTTC
                          \mathsf{C}_{\scriptscriptstyle{-}}
GAM3799 EXTL2
             3' AGAAGGAGGAATAAGA
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                                            AAAC
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AGAAGGAGGAG AAGA

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TCTTCCTCCTT TTCT
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Α GAM3799 FBXL11 3' AGAGAGAGGGGGAACAAGGAGA 85913 AG AGA AGA GAGG AACAAG AGA TCT CTCC TTGTTC TCT CT CCC C GAM3799 FCER1G 3' AGAAGGGTGGGACAAGAGA 85914 $A_A A A A$ AGAAGG GG GA CAAGA GA TCTTCC CC CT GTTCT CT GAM3799 FGF12 3' GAAGGAAGGGAAGGGGAAG 85915 A ACAA GAAGGAGG GAA GAAG CTTCCTTC CTT CTTC C CCC GAM3799 FMR2 3' AGGAGGAGGATGGAAAGAGAAT 85916 A GAAAC A AG AGGAGGA AAGA GAAT TC TCCTCCT TTCT CTTA С ACCT_ _ GAM3799 FOXE3 3' GAGGGAGAAGAAATGAGA 85917 A CA GA GGAGGAGAAA AGA 11 1111111111 111 CT CCTCTTCTTT TCT С AC GAM3799 FOXF1 3' GAAGGAGGGGGACCTCAGCAGA 85918 A AACA A ΑT GAAGGAGG GA AG AGAAT CTTCCTCC CT TC TCTTA CC GGAG G GA A GAM3799 GAS7 3' AGAAGGAGCGGAAGCAAA 85919 AGAAGGAG GAA CAAG TCTTCCTC CTT GTTT GCC C GAM3799 GAS7 3' AGAAGGAGCGGAAGCAAA 85919 GA_ A AGAAGGAG GAA CAAG TCTTCCTC CTT GTTT GCC C GAM3799 GJA5 3' AGAGGAGAGAAGCCAAG 85920 Α $\mathsf{A}_{_}$ AGA GGAGGAGAA CAAG TCT CCTCCTCTT GTTC С CG ACA_ GAM3799 HLALS 3' AGAGGAAGGAGAACTGGAAAAG 85921 Α

AGA GGAGGAGAA AGAAGA

Α

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TCT CTTCCTCTT TTTTCT
                     C
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GAM3799 HMGB3 3' AGAGTGAGGAGAACACGAGA 85922 AG
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GAM3799 IL2RG 3' AGAGGGAGGAGGAAGAA 85923 A A AACAA
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                     C C
GAM3799 KCNJ16 3' AGAAGGAGAAAGGGAAG 85924
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                        CC_
GAM3799 KRTHB1 3' GAAGGGGAGGCAGGAAG 85925
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                    CTTCC CCTCT GT CTTC
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GAM3799 LAMC1
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                        CCCG C
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GAM3799 LGR6
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                    CTTC CTCC CTT TCTTCTTA
                     TCC
            3' AGGAGGAGGACAAG
GAM3799 LRP4
                                 85928 A
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                    AG AGGAGGAG ACAAG
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                     С
                         C_{-}
GAM3799 MAPK10 5' GAAGAAGGAGAAACAGGA 85929
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                    GAAGGAGGAGAACA GA
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GAM3799 MAPT
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                    GGAGG GAA AAGAAGAAT
                    CCTCC CTT TTTTTCTTA
                      CC CT
GAM3799 MAPT
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                                          A_ AC
                    GGAGG GAA AAGAAGAAT
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CC CT
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GAM3799 MAPT
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                     CCTCC CTT TTTTTCTTA
                       CC CT
GAM3799 MAZ
             3' AGGAGCAGGAGAAACAAA 85931
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                     AG AG AGGAGAAACAAG
                     TC TC TCCTCTTTGTTT
                      CG
GAM3799 MCC
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                     GAAGGAGGAGAAAC AGA
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GAM3799 MSI1
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GAM3799 MYEOV 3' AGGAAGAGGAGAGGGTAGGAGA 85934
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GAM3799 MYO1A 3' GGAGGAGAACAAGAAG 85935
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GAM3799 NCOA3 3' AGAAGGAGGGGGAAAAACA 85936
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                        CCCC
GAM3799 NEDD4
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                                              AAACA
                     AG AGGAGGAG AGAAG
                     TC TCCTCCTC TCTTC
                      С
                          \mathsf{C}_{-}
                                              _ A
GAM3799 NID
            3' GGAGGGAGAAACCAAGGAG 85938
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GGAGG AGAAAC AAG AG

11111 111111 111 11

CCTCC CTT TTTTTCTTA

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CCTCC TCTTTG TTC TC
                      С
                         G C
GAM3799 NKX3A 3' AAAAGGAGGAAGGAAGAA 85939
                                          A ACAA
                    AGAAGGAGG GAA GAAGAA
                    TTTTCCTCC CTT CTTCTT
                       _ C__
GAM3799 NRIP1 5' AAGGAGGAGGAGAAGAA
                                 85940
                                          AAACA
                    AAGGAGGAG AGAAGAA
                    TTCCTCCTC TCTTCTT
                       С
GAM3799 PDE4D 3' GGAGGAGGAGGAATGAGAAT 85941
                                           AAC GA
                    GGAGGAGA AA AGAAT
                    CCTCCTCT TT TCTTA
                       CC AC
GAM3799 PDE6D 3' AAGGAGGAGACAAGGAG 85942
                                           AA A
                    AAGGAGGAGA CAAG AG
                    TTCCTCCTCT GTTC TC
                        __ C
GAM3799 PHF1
            3' GAAGGATGGGAGGGTCAGGAA 85943
                                             AAA A
                    GAAGGA GGAG CA GAA
                    CTTCCT CCTC GT CTT
                      AC CCCA C
GAM3799 PHF1
            3' GAAGGATGGGAGGGTCAGGAA 85943
                                            AAA A
                    GAAGGA GGAG CA GAA
                    CTTCCT CCTC GT CTT
                      AC CCCA C
GAM3799 PIK3CD 3' AGGAGGCTGAGGCAAGAAGAAT 85944
                                            A AA
                    AGGAGG GA CAAGAAGAAT
                    TCCTCC CT GTTCTTCTTA
                      GA CC
GAM3799 PLXNA2 3' AGAAGGAAGGGAGACAGAAA 85945
                                            A A A
                    AGAAGGAGG GA ACA GAAG
                    TCTTCCTTC CT TGT CTTT
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CC_

5' AGAAGGGGTGGGAGAAGAAT 85946

AGAAGG GGAGA GAAGAAT

A___ AACAA

GAM3799 PMX1

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TCTTCC CCTCT CTTCTTA
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GAM3799 POU2AF1 3' AGAAGGGAGGGAGGGAAGAAT 85947
                                            A AACAA
                    AGAAGG AGG GA GAAGAAT
                    TCTTCC TCC CT CTTCTTA
                      C _ CCC__
GAM3799 PPP1R12B 3' GAGGGGGAAAAACAAAAGA 85948 A A
                                                Α
                    GA GG GGAGAAACAAGA GA
                    CT CC CCTTTTTGTTTT CT
                    С
GAM3799 PPP2R5A 3' AGGAAGAGGAGGAATGAA 85949 A
                                            AAACAA _
                    AG AGGAGGAG GAA GAA
                    TC TTCTCCTC CTT CTT
                    С
GAM3799 PRKCM 5' AGGAGGAGGAGGGGGGGAGAA 85950 A AAACA A
                    AG AGGAGGAG AG AGAA
                    TC TCCTCCTC TC TCTT
                    С
                        CCGC C
GAM3799 PTK2B 3' AGAAAGAGGAGGAGTAAGA 85951
                                           AAAC
                    AGAAGGAGGAG AAGA
                    TCTTTCTCCTC TTCT
                        CTCA
GAM3799 RAB33A 5' AGAGGAGGAGAGAGGGAGA 85952 A
                                               AACA A
                    AGA GGAGGAGA AG AGA
                    TCT CCTCCTCT TC TCT
                        CTCCC C
GAM3799 RAD23B 3' AAGGGGAAAAGACAGGGAGA 85953 A AGA
                    AAGG GGAGAA ACA AGA
                    TTCC CCTTTT TGT TCT
                     _ C CCC
GAM3799 RORB
            5' AGAGGGAGAAGGAACAAG 85954
                                       A A
                    AGA GGAGGAG AACAAG
                    TCT CCTCTTC TTGTTC
                        С
GAM3799 RTN3 5' AGAGGGAGGGAAATAGA 85955
                                       A A CA
                    AGA GGAGG GAAA AGA
                    TCT CCTCC CTTT TCT
                     C C A_
GAM3799 SC5DL 3' AGAAGAGGAGGAATAAGA 85956
                                        G A C
                    AGAAG AGGAG AA AAGA
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TCTTC TCCTC TT TTCT
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CA GAM3799 SET7 5' AGGAGGAGGAGGAAGA 85957 A AAACAA AG AGGAGGAG GAAGA TC TCCTCCTC CTTCT C GAM3799 SHMT2 3' AGGAGGATGAGAAACAGGA 85958 A G A AG AGGA GAGAAACA GA 11 1111 11111111 11 TC TCCT CTCTTTGT CT C A C GAM3799 SLC29A1 3' AGAGGAGGGGGGGGGGGGGGAGA 85959 A AAACA A AΤ AGA GGAGGAG AG AGAAT TCT CCTCCTC TC TCTTA CGCG CCC GAM3799 SLC2A2 5' AGGAGGAGGAGCAAGGAGA 85960 AAA A AGGAGGAG CAAG AGA TCCTCCTC GTTC TCT CTC C GAM3799 SLC5A1 3' GGAGGAGGACGGACAGGAAAA 85961 AA A GGAGGAG ACA GAAGA CCTCCTC TGT CTTTT CTGCC C GAM3799 SLC7A8 3' GAAGGAGAGAGTAGCCAGGGAA 85962 AAA A GAAGGAG GAG CA GAA CTTCCTC CTC GT CTT T ATCG CC GAM3799 SNAP25 3' AGAGGAGACAGGAGGAA 85963 AA A AGGAGGAGA CA GA GAA TCTCCTCT GT CT CTT __ C C GAM3799 SNAP25 3' AGAGGAGACAGGAGGAA 85963 AA A A GGAGGAGA CA GA GAA TCTCCTCT GT CT CTT $_$ C C GAM3799 SNX9 3' AGAAGAAAATCAAGTGGGGAG 85964 _ A___ AAT GGAGGAGAAA CAAG AGAAT TCTTCTTTTT GTTC TCTTA A ACCCC GAM3799 SPOCK 3' AAAGGAGGAGAAACAGA 85965 Α GAAGGAGGAGAAACA GA

TTTCCTCCTCTTTGT CT

GAM3799 SRGAP2 3' GATGGAGGAGAGGCAAGA 85966 A AAGA GGAGGAGA CAAGA CT CCTCCTCT GTTCT CC GAM3799 SRRM1 3' AGAAGGAGGGGGAACAAAA 85967 **AGA**

AGAAGGAGG AACAAGA

TCTTCCTCC TTGTTTT

CCC

GAM3799 TAGLN2 3' GAAGAAGGAGAGACAGAA 85968 A A

GAAGGAGAGA ACA GAA

CTTCTTCCTCT TGT CTT

С

GAM3799 THBD 3' GGAGGAGAAAACTAGGAAGAAT 85969 AA

GGAGGAGAAA C GAAGAAT

CCTCCTCTTT G CTTCTTA

T ATC

GAM3799 TIRAP 3' AAGAAGAGCAGGAAGAA 85970 AAA A

AGGAGGAG CA GAAGAA

TTCTTCTC GT CTTCTT

GAM3799 TPD52L2 3' GAAGGAGGAGGAGGAAGAAG 85971 AAAC

GAAGGAGGAG AAGAAG

CTTCCTCCTC TTCTTC

CTCC

GAM3799 TPST1 3' AAAAGAGAACAAGAGGA 85972

GGAGGAGAA CAAGA GA

TTTTCTCTT GTTCT CT

_ C

GAM3799 TRPC5 5' AGAAGGAGGAGGAAGGAAG 85973 A AACAA

AGAAGGAGG GA GAAG

TCTTCCTCC CT CTTC

_ CCTTC

GAM3799 VAMP1 3' AAGGAGGAGCCCAGAGGAGA 85974 $AAA _ A$

AAGGAGGAG CA AG AGA

TTCCTCCTC GT TC TCT

GG_ C C

GAM3799 VANGL2 3' AGAAGCGAGGAGAAG 85975 **AACAA**

AGAAG GAGGAGA GAAG

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TCTTC CTCCTCT CTTC
                      G
GAM3799 VAT1 3' AGAAGGAGGTGGGAAACAGGA 85976
                                            A A
                    AGAAGGAGG GAAACA GA
                    TCTTCCTCC CTTTGT CT
                        ACC
                            C
GAM3799 XPNPEP2 3' AGAAGGAGGATGAATGCAAAG 85977
                                               _ ACAA
                    AGAAGGAGGA GAA GAAG
                    TCTTCCTCCT CTT TTTC
                        A ACG
GAM3799 XYLB
            3' AGGAGGGGAGAGAGAGA 85978 A A AACA A
                    AG AGG GGAGA AGA GA
                    TC TCC CCTCT TCT CT
                     C C CC
GAM3799 YWHAE 3' GAAGGAGAAGAAACAAAGAAT 85979
                                                 Α
                    GAAGGAGGAGAAACAAGA GAAT
                    CTTCCTCTTCTTTGTTTT CTTA
GAM3799 YWHAZ 3' AGGAGGAAGAAGAGGAAG 85980
                                              CAA
                    AGGAGGA GAAA GAAG
                    TCCTCCT CTTT CTTC
                       T CTC
GAM3799 ZIC1
            5' AGGAGGAGGAGGAACAAGA 85982 A
                                            Α
                    AG AGGAGGAG AACAAGA
                    TC TCCTCCTC TTGTTCT
                     С
                         C
GAM3799 ZIC1
            5' AGGAGGAGGAGGAACAAGAGGA 85981
                    AG AGGAGGAG AACAAGA GA
                    TC TCCTCCTC TTGTTCT CT
                     C
                         C
                             C
GAM3799 ZIC3
            5' GAGGGAGAAGGGAGAA 85983 A
                                               ACA A
                    GA GGAGGAGAA AG AGAA
                    CT CCTCCTCTT TC TCTT
                          CCC C
GAM3799 ZNF207 5' AGAAGCAGGAGAAACGAG 85984
                                          G
                                              Α
                    AGAAG AGGAGAAAC AG
                    TCTTC TCCTCTTTG TC
                      G
                           С
GAM3799 ADPRH 5' GAGGAGCAAGAAGAAT
                                 85985
                                         AAA
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GAGGAG CAAGAAGAAT

CTCCTC GTTCTTCTTA

GAM3799 ARFGAP1 3' GAAGGAGGAGGAACGACGA 85986 A AA GAAGGAGGAG AAC GA CTTCCTCCTC TTG CT C CTG GAM3799 ARHGEF11 3' AGGAGGAGTGGGGACGCAGAGG 85987 AA___ A_ A AGGAGGAG AC AGA GA TCCTCCTC TG TCT CT ACCCC CG C GAM3799 ATP9A 3' AGAAGGGGGAGAAATAAAA 85988 AGAAGG GGAGAAA AAGA TCTTCC CCTCTTT TTTT С Α GAM3799 BMF 3' AGAAGGGAGAGGGAAACGTGA 85989 A AA AGAAGG AGG GAAAC GA TCTTCC TCC CTTTG CT CTC _ CA GAM3799 C17orf31 3' AGGAAGAGGAGCAGCAGGAAG 85990 A AAA A AG AGGAGGAG CA GAAG TC TTCTCCTC GT CTTC GTC C GAM3799 C5orf6 3' AGAGGGAGAGAGCCAGGGGAG 85991 A AA A A GAAT AGA GGAGGAGA CA GA GAAT TCT CCTCTTCT GT CT CTTA С CG CCC C GAM3799 C5orf7 3' GAGGGGGAGAAAAAGAA 85992 A A GA GG GGAGAAA AAGAA CT CC CCTCTTT TTCTT C _ GAM3799 CACNG4 3' AGGAGGGGGAAGAAAGAA 85993 A_ ACA AGGAGG GAA AGAAGAA TCCTCC CTT TTTTCTT CC C_ GAM3799 CDH22 3' AGAGGAGGAGGAATGGAAGA 85994 Α AAACAA AGA GGAGGAG GAAGA TCT CCTCCTC CTTCT CTTAC_ ACA_ GAM3799 CED-6 3' AGAAGAAAATATGAGAAGA 85995 GGAGGAGAA AGAAGA

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TCTTCTTTT TCTTCT
                        ATAC
GAM3799 COL4A3BP 5' AGCAGGAGGAGGACGAAG 85996 A
                                              AA AA
                    AG AGGAGGAG AC GAAG
                    TC TCCTCCTC TG CTTC
                     G
                         CC
GAM3799 CORO1A 5' AGGAGGAGGAGGAAGA
                                  85957 A
                                            AAACAA
                    AG AGGAGGAG
                                 GAAGA
                    TC TCCTCCTC
                                CTTCT
                     С
GAM3799 DJ726C3.2 3' AGAGGGAGGAGAAGAGGAGGA 85997
                                                ACAA A
                    AGA GGAGGAGAA GA GA
                    TCT CCTCCTCTT CT CT
                     С
                          CTC C
GAM3799 DKFZp547l224 5' AAAAGAGGGTAAGAAGAA 85998
                                             AGAAAC
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GAM3799 DKFZp547M072 3' AGGAGGAGGAGGAAGA
                                     85957 A
                                               AAACAA
                    AG AGGAGGAG GAAGA
                    TC TCCTCCTC
                                CTTCT
GAM3799 DKFZP586C1324 3' AGAAGGAAGGAAGGAAG 85999
                                                A ACA
                    AGAAGGAGG GAA AGA
                    TCTTCCTTC CTT TCT
                        _ CCC
GAM3799 DKFZp761B0514 3' GAAGGAGGAGAAA
                                      86000
                                               AAACA
                    GAAGGAGGAG AGAAG
                    CTTCCTCCTC TCTTT
                        C___
GAM3799 DKFZp761G2113 3' GGAGGAGGGGGGGGGGGGGAGGAA 86001 AA A___ A
        Т
                     GGAGGAGA CA GAGAAT
                    CCTCCTCT GT CT CTTA
                       CC CCCC C
GAM3799 DNAJA4 3' AGAAGACTGGGAAACAAGAGGA 86002
                                                   Α
                                           A_ A
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AGAAGG GG GAAACAAGA GAAT

TCTTCT CC CTTTGTTCT CTTA

GA _ C
GAM3799 DUSP10 3' AAAAGGGGGAGAAACAAG 86003 A
AGAAGG GGAGAAACAAG
|||||||||||||||||

AΤ

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TTTTCC CCTCTTTGTTC
                       C
GAM3799 DUSP10 3' AAAAGGGGGAGAAACAAG 86003
                                           Α
                     AGAAGG GGAGAAACAAG
                     TTTTCC CCTCTTTGTTC
                       C
GAM3799 EZF-2 3' GAAGGAGGAGGAAGA
                                  86004
                                           AACAA
                     GAAGGAGGAGA GAAGA
                     1111111111 11111
                     CTTCCTCCTCT CTTCT
                         С
GAM3799 FBXO27 3' AGAAGAGAGGGGAGGGCAAGAA 86005
                                              _ A AA
                     AGAAG GAGG GA CAAGAA
                     TCTTC CTCC CT GTTCTT
                       T C CCC
GAM3799 FHX
            3' GAAGGAAGAGAAGAA
                                 86006
                                           AACAA
                     GAAGGAGGAGA GAAGAA
                     CTTCCTTCTCT CTTCTT
GAM3799 FIGN
            3' AGAAGGGAGAGATGGAGA 86007
                                               AACA
                     AGAA GGAGGAGA AGA
                     TCTT CCTCCTCT TCT
                      CC
                           ACC
GAM3799 FLJ00058 5' AGAAGGAGGAAACAGGA 86008
                                                Α
                     AGAAGGAGG GAAACA GA
                     TCTTCCTCC CTTTGT CT
                           С
GAM3799 FLJ10468 3' AGGAGGAGGAGGAAGA
                                   85957 A
                                             AAACAA
                     AG AGGAGGAG
                                  GAAGA
                     TC TCCTCCTC
                                 CTTCT
                     С
GAM3799 FLJ10781 3' GAAGGCGGGAGGAAGAA
                                   86009
                                          A_ AAACAA
                     GAAGG GGAG
                                 GAAGAA
                     CTTCC CCTC
                                 CTTCTT
                       GC
GAM3799 FLJ11078 3' GAGGGAGGAGAAAAAGA 86010 A
                                              С
                     GA GGAGGAGAAA AAGA
                     CT CCTCCTCTTT TTCT
                     С
                          Т
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GAM3799 FLJ12700 3' GAAAGAGGAGGAGCAGGAA 86011

GAAGGAGGAGA CA GAA

AA A

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CTTTCTCCTCT GT CTT
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C_ C

GAM3799 FLJ12875 3' AGGAGGACGAGAGATGAAC 86012 _ AACA A

AGGAGGA GA AGA GAAT

TCCTCCT CT TCT CTTG

G C___ A

GAM3799 FLJ13158 3' AGAGGAAGGACAGAGGAAGA 86013 AA A_

GGAGGAG ACA GAAGA

TCTCCTT TGT CTTCT

CC CTC

GAM3799 FLJ13769 3' AGGAGGAAGAGAACAGAA 86014 A A A

AG AGGAGGAGAA CA GAA

TC TCCTTCTCTT GT CTT

С

GAM3799 FLJ14442 3' GGAGGAGGGGGAAAAAGAA 86015 AAAC

GGAGGAG AAGAAGAA

CCTCCTC TTTTTCTT

CCCC

GAM3799 FLJ14442 3' AGAGGGGAGAGAGAGAGAGCA 86017 A_ _ AAC A

GA AGA GGAG GAGA AAG AGA

TCT CCTC CTCT TTC TCT

CC T ACC G

GAM3799 FLJ14442 3' AGAAGGAGAGGGAACAAG 86016

AGAAGGAG AG AACAAG

GA

TCTTCCTC TC TTGTTC

 $_{-}$ CC

GAM3799 FLJ14594 3' AGGAGGAGGAGGAAGA 85957 A AAACAA

AG AGGAGGAG GAAGA

11 11111111 111111

TC TCCTCCTC CTTCT

С

GAM3799 FLJ20294 5' AGAAAGAGGAGACAGGAA 86018 AA A

AGAAGGAGAGA CA GAA

TCTTTCTCCTCT GT CTT

__ C

GAM3799 FLJ20337 3' AGGAAGAGGGTTGGGAAGAAT 86019 AAACAA

AGGAGGAG GAAGAAT

TCCTTCTC CTTCTTA

CCAACC

GAM3799 FLJ21596 3' AGAGGGAGGGGAAAAAGAA 86020 A A C

AGA GGAGG GAAA AAGAA

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TCT CCTCC CTTT TTCTT
                     C C _
GAM3799 FLJ21940 3' GAGGGAGGAGAAATGCAGGAA 86021 A _ A
                    GA GGAGG AGAAA CA GAAG
                   CT CCTCC TCTTT GT CTTT
                    C C AC C
GAM3799 FLJ22055 3' GATGGAGGATAGCAAGAAGAAT 86022 A GAAA
                   GA GGAGGA CAAGAAGAAT
                   CT CCTCCT GTTCTTCTTA
                    A ATC
GAM3799 FLJ23231 3' GATGGAGGAGAAGAA 86023 A
                                          AACA
                   GA GGAGGAGA AGAAGA
                   CT CCTCCTCT TCTTCT
GAM3799 FLJ32894 3' AGGAGGAGGAGGAAAATAAG 86024 A CAAG
                   AG AGGAGGAG AAA AAG
                   TC TCCTCCTC TTT TTC
                    С
                        C TA
GAM3799 GBTS1 3' AGAAGAGGAGGAGGCCGAGGA 86025
                                         __ AAACAA A
                   AGA AGGAGGAG GA GA
                   TCT TCCTCCTC CT CT
                         CGG___ C
                    TC
GAM3799 GPNMB 3' GAAGGAGAAAAAGAA 86026 G C
                   GAAGGAG AGAAA AAGAA
                   CTTCCTC TCTTT TTCTT
GAM3799 H GS165L15.1 3' AGAGGAGGAGGTGAAGA 86027 A AACAA
                   AGA GGAGGAGA GAAGA
                   TCT CCTCCTCT CTTCT
                        CCA
GAM3799 HCDI 3' GAAAGAGGACTGGGAGAGGAAT 86028 GAAACA A
                   GAAGGAGGA AGA GAAT
                    CTTTCTCCT TCT CTTA
                       GACCC_ C
GAM3799 HIC2 3' GAAGGAGGGAAAGCGAAA 86029 A CAA
                   GAAGGAGG GAAA GAAG
                   CTTCCTCC CTTT CTTT
                      _ CG_
GAM3799 HN1L 3' AGAAGGCAGGACAGATGCAAGA 86031
                                          _ __ AA
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AGAAGG AGGA GA CAAGAAGA

AGA

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TCTTCC TCCT CT GTTCTTCT
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GAM3799 HN1L 3' AGAAAGACACAGGAAGAA 86030
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                       G C
GAM3799 HRH4
            3' AGAGGTGAGGACTAAGAAGAAT 86032
                                           A A_ _
                    GGAGG GA AC AAGAAGAAT
                    TCTCC CT TG TTCTTCTTA
                      A CC A
GAM3799 IL14
           3' AGGAGGAGGAGAAGCGCAAGGA 86033
        G
                     AG AGGAGGAGAA CAAG AG
                    TC TCCTCCTCTT GTTC TC
                     C
                          CGC C
GAM3799 ITGA10 3' GAGGAGGAGGGAAGCAGA 86034 A
                                            AAAC A
                    GA GGAGGAG AAG AGA
                    CT CCTCCTC TTC TCT
                         CC__ G
GAM3799 KIAA0057 3' AGGAGAGGGAGAAATGGGAGAA 86035 A GA
                                                  CAA A
                    AG AG GGAGAAA GA GAA
                    TC TC CCTCTTT CT CTT
                     C TC
                           ACC
GAM3799 KIAA0212 3' AGAAGGAAGAGGGTATAGAA 86036
                                             AAACA
                    AGAAGGAGGAG AGAA
                    TCTTCCTTCTC TCTT
                         CCATA
GAM3799 KIAA0298 3' AGCAGGAGGAGGGCCCAGAGG 86037 A
                                                AACA A
        Α
                     AG AGGAGGAGA AGA GA
                    TC TCCTCCTCT TCT CT
                     G
                          CCGGG C
GAM3799 KIAA0319 3' AAAAGGAGGAGGGCAGAAGAA 86038
                                               AAACA
                    AGAAGGAGGAG AGAAGAA
                    TTTTCCTCCTC TCTTCTT
                         CCCG
GAM3799 KIAA0352 3' GAAGGGGGATGAAAGGCCTGGA 86039
                                             A _ CAAGAA
        AΤ
                     GAAGG GGA GAAA
                                    GAAT
                    CTTCC CCT CTTT CTTA
                      C A CCGGAC
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GAM3799 KIAA0444 3' GAAGGAGGGGAAATGTCAGCCA 86040

GAAGGAGG GAAA AG AG

G

A CA_ A_

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CTTCCTCC CTTT TC TC
                        C ACAG GG
GAM3799 KIAA0563 3' AGAATGAGGAGAAGGGAGA 86041 G
                                                ACA
                     AGAA GAGGAGAA AGA
                     TCTT CTCCTCTT TCT
                           CCC
GAM3799 KIAA0648 3' GAAGGGGGAGAACAGA
                                          A AA
                                   86042
                     GAAGG GGAGAA CA GA
                     11111 111111 11 11
                     CTTCC CCTCTT GT CT
                       С
GAM3799 KIAA0759 3' GAAGGAGGAGGAACAGAAAA 86043
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                     GAAGGAG GAA CA GAAGA
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                        TC
GAM3799 KIAA1054 3' AGGAGGAAGAAACGCAGGAAG 86044
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                     TCCTCCT CTTTG CTTC
                        T CGTC
GAM3799 KIAA1128 3' AGAAGGAGGAGCAGAA 86045
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                     AGAAGGAGG GA AGAA
                     TCTTCCTCC CT TCTT
                        _ CG_
GAM3799 KIAA1181 3' GAACGAGGAGAAGAGAGAGAAGA 86046
                                             G
                                                  ACAA
                     GAA GAGGAGAA GAAGA
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                          CTCTC
                      G
GAM3799 KIAA1265 3' AGTAGGAGGAAAGAAGA
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                                             GAAAC
                     AG AGGAGGA AAGAAGA
                     TC TCCTCCT TTCTTCT
                      Α
GAM3799 KIAA1327 3' AGAAGAGGAATGAAGA
                                   86048
                                          G AAACAA
                     AGAAG AGGAG
                                  GAAGA
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                                 CTTCT
                          Α
GAM3799 KIAA1363 3' AGAGGGAGGAAAGACGAG 86049
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                     AGA GGAGGAGA AC AG
                     TCT CCTCCTTT TG TC
                      С
                          CC
GAM3799 KIAA1500 3' GAAGGGGTGTGCAAGAAGAAT 86050
                                             A AGAAA
                     GAAGG GG CAAGAAGAAT
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CTTCC CC GTTCTTCTTA
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GAM3799 KIAA1549 3' AGAAGAAGGAGGAAGA
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GAM3799 KIAA1671 3' AGGAGGAAGAGAAATGAG 86052 A
                                               CA
                     AG AGGAGGAGAAA AG
                     TC TCCTTCTCTTT TC
                      С
                           AC
GAM3799 KIAA1750 3' GAGGGAGGAAAGAAGAA 86053 A
                                             GAAAC
                     GA GGAGGA AAGAAGAA
                     CT CCTCCT TTCTTCTT
                      С
GAM3799 KIAA1817 3' GGAGGAGAAGCAAGGAAG 86054
                     GGAGGAGAA CAAG AAG
                     CCTCCTCTT GTTC TTC
                        C C
GAM3799 KIAA1831 3' GAAGGAGGGAGGCAAGCCAA 86055
                                              A AA AA
                     GAAGGAGG GA CAAG GA
                     CTTCCTCC CT GTTC TT
                        _ CC GG
GAM3799 KIAA1878 3' GAGGGAGAGAGAGAGA 86056 A AACA
                     GA GGAG GAGA AGAAGA
                     CT CCTC CTCT TCTTCT
                      CTC
GAM3799 MGC10540 3' AGGAGGAGGAGACAGAAG 86057 A
                                                AACA
                     AG AGGAGGAGA AGAAG
                     TC TCCTCCTCT TCTTC
                      С
                          G
GAM3799 MGC10812 3' AGCAGGAGGAGAAAGGGAA 86058 A
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                     AG AGGAGGAGAAA GAA
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                     TC TCCTCCTCTTT CTT
                      G
                           CC_{-}
GAM3799 MGC16824 5' AGGAGGAGGAGGACGTGGAAGA 86059 A
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         Α
                     AG AGGAGGAG
                                   GAAGAA
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                      С
                          CTGCAC
GAM3799 MGC21675 3' AGAAAGAGGAGGAACCGGA 86060
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                     AGAAGGAGGAG AAC GA
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TCTTTCTCCTC TTG CT
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CTTCCTCC CTT TCTTTT

C CACA

GAM3799 MGC4415 3' AAGAAGGAGATCTTGAGAAG 86063 AACA_

AAGGAGGAGA AGAAG

TTCTTCCTCT TCTTC

AGAAC

GAM3799 MGC5338 3' GAAGGGGGAGAGAAAA 86064 A AACA

GAAGG GGAGA AGAAGA

CTTCC CCTCT TCTTTT

C C___

GAM3799 MGC5521 3' GAAGGAGGAAACCAGAA 86065

GAAGGAGGAGA AGAA

AACA

A AACAA A

CTTCCTCCTTT TCTT

GG

GAM3799 MGC5566 3' GGAAGAGGAAACATGGGAAG 86066 _ A_

GGAGGAG AAACA GAAG

CCTTCTC TTTGT CTTC

C ACC

GAM3799 MPHOSPH10 5' AGGAGGGTGGGAAACAAAA 86067 A

AGGAGG GAAACAAGAA

111111 1111111111

TCCTCC CTTTGTTTTT

CACC

GAM3799 NEUGRIN 3' AGAGAGCCTAAGCAAGAAGA 86068 _ AG_ A

GGAG G AA CAAGAAGA

TCTC C TT GTTCTTCT

T GGA C

GAM3799 NFAT5 3' AAAGGAGGAGGAGGAAT 86069

GAAGGAGG GA GAAT

TTTCCTCC CT CT CTTA

_ CC__ C

GAM3799 NFAT5 3' GAAGGGGAGAGGGAGAGAT 86070 A AACAAGA

GAAGG GGAGA AGAAT

```
CTTCC CCTCT TCTTA
                      _ CCCTCCC
GAM3799 NOVA2 3' AGATGGGAGGAGAAAAG 86071 A
                                              AACA
                    AGA GGAGGAGA AGAAG
                    TCT CCTCCTCT TTTTC
                     AC
                          С
GAM3799 NRN1
            5' AGAGGGAGAGAGAAAGA 86072
                                        Α
                                            AAC
                    AGA GGAGGAGA AAGA
                    TCT CCTCCTCT TTCT
                     С
                         CT
GAM3799 OBTP
            5' AGAAGGGAGGAGTGAAACTAG 86074
                    AGAA GGAGGA GAAAC AG
                    TCTT CCTCCT CTTTG TC
                     CC
                         CA A
GAM3799 OBTP
           3' AGGAGGAGGAGCAGGTGGAGAA 86073 A
                                              AAACA
                    AG AGGAGGAG AGAAG
        Α
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GAM3799 P5326 3' AGGAGGAAGACAGGAGGA 86076
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GAM3799 PADI1 3' GAAAGAGGCCAGGGAAGAAT 86077
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GAM3799 PCDH10 5' AGGAGGAGGAGGAAGAAGA 86078 A
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GAM3799 PCDH10 5' AGGAGGAGGAGGAAGAAGA 86078 A
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                         C_{-}
GAM3799 PDE1C 3' GAAGAAGGAGAAGAAGGAGAAT 86079
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C_ C
GAM3799 PELI1 3' GAAGGAGGGGAGAGAAGA 86080
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GAM3799 PPM1A 5' AGAAGGAGGAGGAAGA
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                                 GAAGA
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GAM3799 PRO1598 5' AGAATGGGAATGGGAATAAGAA 86082
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                     AC TA _ A_
GAM3799 RAB2
            3' AGGAGGAGAGGGGTGAAAGAA 86083
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GAM3799 RAB3GAP 3' AGAAGGGGAGGGAGACGA 86084
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GAM3799 RAB6B 5' AGGAGGAGGAGGAAAAAG 86085 A
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                    С
                         С
GAM3799 RBPMS 5' AGGAGGAGGAGGAAGA
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GAM3799 RFX3
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GAM3799 RNF24 3' GAAGGAGGGGAGAGGCCAAA 86086
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GAM3799 RODH-4 5' AGAAGGAGAAGGCAAAGA 86087
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GAM3799 SCAMP5 3' AGAAGGAGGAGAAGGCAG 86088
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GAM3799 SCYA13 3' AGAAGAGGGCCAGAGGAGAA 86089
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                       _ CG_ C C
GAM3799 SCYA22 3' GAAGGAGGCAGGGAAAGTGGAA 86090
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                         GTCCCT AC
GAM3799 SMARCF1 3' AGGAGGAGAGAAACAGGA 86091 A
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                      C T C
GAM3799 SMARCF1 3' AGGAGGAGAGAGAAACAGGA 86091 A
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GAM3799 SMARCF1 3' AGGAGGAGAGAGAAACAGGA 86091 A _
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GAM3799 SNTA1 3' AAGGAGGAGAGACAGGA 86092
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GAM3799 TNFSF13 5' GAGGGAGGAGGAAGCAAGCTA 86094 A
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                         C C GA
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GAM3799 TNKS1BP1 3' GAAGGAGGAGGAAG
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GAM3799 TP53INP1 5' AGGTGAAAAGCAAGAAGA 86097
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GAM3799 TP53INP1 3' AGGAGGAAGAGAAGTAGCAAG 86096 A
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GAM3799 TP53INP1 3' AGGAGGAAGAGAAGTAGCAAG 86096 A
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GAM3799 VRP
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GAM3799 ZFP100 5' AGGAGGAGGAGGACAAG
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GAM3799 LOC123775 3' GGAGGAGAAAGAGAGA 86102
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GAM3799 LOC124895 5' GAGGGAGGAGACAGTCTCGGAG 86103 A
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GAM3799 LOC138389 5' GAAGGAGAAACAGCGA 86105
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GAM3799 LOC143274 3' GAAGGAGGCAGAGATAAGCGA 86106
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GAM3799 LOC143677 5' GAAGGAGGAGGAAGCAAG 86107
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GAM3799 LOC148113 3' AGAAGAAGGAGGGGCAAAA 86114
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GAM3799 LOC148195 5' AGAAGGAGGAGTAGAGGAGA 86115
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GAM3799 LOC148696 5' GAATGAGGAGAATCAGAA 86119
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GAM3799 LOC150051 3' AGAAGAAGGAGGAATCAG 86121
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GAM3799 LOC150067 5' AGGAGGAGGAGGAAGA
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GAM3799 LOC150498 3' GAAGGAGAAGAACAAAGAAT 86122
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GAM3799 LOC151195 5' GGAGGCAAGAAGAAT
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GAM3799 LOC151736 5' AGGAGGAGAGGGAACAAGCTTC 86124
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GAM3799 LOC152905 5' AGAGGGAGGGGAAATAGA 85955
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GAM3799 LOC153077 3' AGAAGGAAGGGGGAAAAGAAT 86126
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GAM3799 LOC154877 3' GAGGGAAGGAGATGGCCAGAGA 86127 A _ AA_ _
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GAM3799 LOC158267 3' AGAAGGAGGAAACAGGAGGA 86129
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GAM3799 LOC161003 5' AGAGGAGAAAGTATGAGAGA 86131
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GAM3799 LOC161784 5' GAAGGAGAAGAATGAGA
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GAM3799 LOC164295 5' AGAGGGAGGAGAAGA 86133
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GAM3799 LOC196047 3' AGGAGGAAGAGGGAAATGAAGA 86135 A
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GAM3799 LOC196812 3' AGAAGGAGGAGTGGCCACCAGA 86136
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GAM3799 LOC201173 3' AGAATGAGGAGAAGGGAGA 86041
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GAM3799 LOC220002 5' AGAAGAAGGAGAAGTCACAAA 86137
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GAM3799 LOC221935 3' GAAGGAGGGAAGGAAG 86140
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GAM3799 LOC253943 3' GGAGGAGGAAGAAGAAT 86141
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GAM3799 LOC254532 5' AGGAGAAGGAAGCAAG 86142 A
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GAM3799 LOC257459 3' AGGAGGAGGAGAAAGGAG 86146 A
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GAM3799 LOC90139 3' AGCAGGAGGAGATTAGAGGA 86152 A
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GAM3799 LOC90141 3' AGAGGGTAGGGGGCAAGAAGA 86153 A _ AGAAA
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GAM3799 LOC92299 5' AGGGGGAGGAGAGAGA
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GAM3800 LOC257336 5' TACATTTATTTTTTCAAAG 86164
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GAM3801 ERBB2IP 3' TTAAAGACTCTGGAAGTGTTGA 86167
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GAM3801 NCALD 3' AGGGGCAGGGAAACTGAAT 86171
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GAM3801 DCLRE1A 3' TTAAGGGTCCCAGGGAGACC 86172 A CT A
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                    AATT CC GGTCCCT TGG
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GAM3801 FRAG1 3' TAAAGGCCAGAAACTG
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GAM3801 KCNK13 3' TTAAAGGCCTGAAGCTGAA 86174
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GAM3801 KIAA0349 3' TTAAAAGCTAAAGAAACTG 86176
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GAM3801 KIAA1243 3' AGGGTCCAGGAAGCCTGA 86177 C AA AGG TCCAGGGA CTGA ||| |||||||| ||||

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GAM3801 LOC152719 3' AAGGTCCAGGAAACCTG 86180
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GAM3801 LOC154860 3' TAAAGGTTGGAGAAACTG 86181
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GAM3801 LOC199678 3' AGCTTTGGAAACTGAAT
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GAM3801 LOC92299 3' AAGACAAGGGAAACTGA 86183
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GAM3802 HIP1
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GAM3802 IGF1
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GAM3802 MBD4
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GAM3802 DKFZP434G072 5' TCCCCTCTTCACTGTTGTC 86189
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GAM3802 FLJ10539 3' GCGATTTTTTCTTCAATATT 86190 Т С GCG ATTTTTTCTTCA TGTT CGC TAAAAAAGAAGT ATAA Т GAM3802 KIAA0644 3' GTATTTTTTCACATTTGT 86191 CT TG GTATTTTTT TCAC TTGT CATAAAAAA AGTG AACA TA GAM3802 LOC153525 5' GTATTTTTTCTTCATATT 86192 С GTATTTTTTCTTCA TGTT CATAAAAAAGAAGT ATAA GAM3802 LOC206426 3' GTCTCCTTTCTTCATTGTTGTC 86193 A C GT TTTTTTCTTCA TGTTGTC CA AGGAAAGAAGT ACAACAG G Α GAM3802 LOC93538 3' TTTTTCTTTATTGTTGTC 86194 CAC TTTTTCTT TGTTGTC AAAAAGAA ACAACAG **ATA** GAM3803 ADAMTS8 5' TTTCTCCTCTGCGGCCAAG 86197 CGG G TTTCTCCTC GGC CAAG AAAGAGGAG CCG GTTC ACG _ GAM3803 EHD1 3' CACTTCTCTTCCCACAGG 86198 CATTTCTC CTC CGGG GTGAAGAG GGG GTCC AA T GAM3803 ESRRB 5' CATTTCTCTTCCACCCCAGG 86199 CATTTCTC CTCCGGG GTAAAGAG GGGGTCC **AAGGT** GAM3803 FHL2 5' CCTCCCTCCGGGGCGCA 86200 Т TTTC CCTCCGGGGCGCA GGAG GGAGGCCCCGCGT GAM3803 ITGA1 3' CATCTCTCCTCTTCTCAGG 86201 CATTTCTCCTC CGGG

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GAM3803 MAPK14 3' ATTTCTCCCCAAACCAAG 86202
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                     TAAAGAGG GGTTT G GTTC
GAM3803 MAPK14 3' ATTTCTCCCCAAACCAAG 86202
                                              GG
                     ATTTCTCC CCGGG C CAAG
                     TAAAGAGG GGTTT G GTTC
GAM3803 MMP25 3' TTCTCTCCAGGGTGCAAG 86203
                                           С
                                               С
                     TTCTC TCCGGGG GCAAG
                     AAGAG AGGTCCC CGTTC
                           Α
GAM3803 NPAT
             3' CATTTTCCTCCAAAACA
                                  86204
                                         C
                     CATTT TCCTCCGGGGCG
                     GTAAA AGGAGGTTTTGT
                                            CCGGG __
GAM3803 RBMX
             3' TTTCTCCTTTGCAATCAAG 86205
                     TTTCTCCT GCG CAAG
                     AAAGAGGA CGT GTTC
                         AA___ TA
GAM3803 RGS3
             5' CATTTCCCCTTTCCTGGG 86206
                                             G
                     CATTTCTCC TCC GGG
                     GTAAAGGGG AGG CCC
                         AA A
GAM3803 STAT4 5' CATTTCTCCTCCCAC
                                 86207
                                           GGGG
                     CATTTCTCCTCC CGC
                     GTAAAGAGGAGG GTG
GAM3803 TEP1
             3' CATTCCTCCTCCTGGCA
                                  86208
                                            GG
                     CATTTCTCCTCC GGCG
                     GTAAGGAGGAGG CCGT
                          \mathsf{A}_{-}
                                             TCCGG ___
GAM3803 TGFBI 3' CATTTCTCCAGCTGTGCAAG 86209
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CATTTCTCC GGC GCAAG

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GTAAAGAGG TCG CGTTC
                        ____ ACA
                                        _ _ GGGG
GAM3803 WDR4 3' TTTCTCACTTCCCACAAG 86210
                    TTTCTC CT CC CGCAAG
                    AAAGAG GA GG GTGTTC
                      T A ____
GAM3803 WDR4
                                        _ _ GGGG
             3' TTTCTCACTTCCCACAAG 86210
                    TTTCTC CT CC CGCAAG
                    AAAGAG GA GG GTGTTC
                      ΤA
GAM3803 A
           3' TTTCTCCTCTGAGTTCAGCA 86211
                                         C GC
                    TTTCTCCTC GGG GCA
                    AAAGAGGAG CTC CGT
                       A AAGT
GAM3803 A 3' TTTCTCCTCTGAGTTCAGCA 86211
                                         C GC
                    TTTCTCCTC GGG GCA
                    AAAGAGGAG CTC CGT
                       A AAGT
GAM3803 BPES 3' CATTTCTCCTTCCCAAGG 86212
                    CATTTCTCCT CCGGGG
                    GTAAAGAGGA GGTTCC
                        AG
GAM3803 BZW2 3' CATTTCTCCCTCTGCACAAG 86213
                                           CCGGG
                    CATTTCTCCT GCGCAAG
                    GTAAAGAGGG CGTGTTC
                        AGA
GAM3803 C20orf39 5' CATTTCTCCTCCGGGACA 86214
                    CATTTCTCCTCCGGGGCG
                    GTAAAGAGGAGGCCCTGT
GAM3803 CALN1 3' CATTTCCCCTTCTCCCAAG 86215
                    CATTTCTCCT CCGGG
                    GTAAAGGGGA
                                GGTTC
                        AGAGAG
GAM3803 ECE2 3' CATTTCTCCCCTGATCCAGG 86216
                    CATTTCTCC TCCGGG
                    GTAAAGAGG AGGTCC
                       GGACT
GAM3803 FLJ10483 5' CTTCTCCCTCTGGGGTGCA 86217
                                          _{\rm C} C
                    TTTCTCC TC GGGG GCA
```

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GAAGAGG AG CCCC CGT
                        G A A
GAM3803 FLJ11362 3' CATTTCTCCTCGGGACA 86218
                                            С
                     CATTTCTCCTC GGGGCG
                     GTAAAGAGGAG CCCTGT
GAM3803 FLJ13769 3' ATTCCTCCTCTGCACA
                                           CGGG
                                  86219
                     ATTTCTCCTC GCGCA
                     TAAGGAGGAG CGTGT
GAM3803 FLJ20079 3' CATTTCTCTTCTTTCACAAG 86220
                                            C CGGGG
                     CATTTCTC TC CGCAAG
                     GTAAAGAG AG GTGTTC
                        A AAA
GAM3803 FLJ23132 3' CATTTCCCCTCCATTTGTAGG 86221
                     CATTTCTCCTCCG GGG
                     GTAAAGGGGAGGT
                                   TCC
                          AAACA
GAM3803 KIAA0057 3' CATTTCTCCCCCAGTTGCA 86222
                                               GGC
                     CATTTCTCCTCCGG GCA
                     GTAAAGAGGGGGTC CGT
                          AA
GAM3803 KIAA0323 3' CATTTCTCCTCCCAACAGG 86223
                     CATTTCTCCTCC GGG
                     GTAAAGAGGAGG TCC
                          GTTG
                                           TC G
GAM3803 KIAA0356 3' CACTTCTCCACAGTGCA
                                   86225
                     CATTTCTCC CGG GCG
                     GTGAAGAGG GTC CGT
                        T_ A
GAM3803 KIAA0356 3' CATTTCTCCTTCTCCTAATGGG 86224
                     CATTTCTCC TCC GGG
                     GTAAAGAGG AGG CCC
                        AAG ATTA
GAM3803 KIAA0574 3' TCTCTCCTGCAAAAGTGCA 86227
                                            C _C
                     TTTCTCCT CGGG G GCA
                     AGAGAGGA GTTT C CGT
                        CTA
GAM3803 KIAA0574 3' CATTTATCCTCCGCCAA
                                   86226
                                             GGG G
                     CATTT TCCTCC GC CAA
```

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GTAAA AGGAGG CG GTT
                      Т
GAM3803 KIAA0830 3' CATTTCTCCTCTGTCAAG 86228
                    CATTTCTCCTC CGGG
                    GTAAAGAGGAG GTTC
                         ACA
GAM3803 KIAA1204 5' TTTCTCCTCAGCTTAAG
                                          CGG GC
                                  86229
                    TTTCTCCTC GGC AAG
                    AAAGAGGAG TCG TTC
                        AA
GAM3803 KIAA1276 5' CATTTCCCTGGAGAGCG 86230
                                          T CC
                    CATTTC CCT GGGGCG
                    GTAAAG GGA TCTCGC
                       _ CC
GAM3803 KIAA1679 3' TTCCTCCTCCACAGCGCA 86231
                                            G
                    TTTCTCCTCCG GGCGCA
                    AAGGAGGAGGT TCGCGT
                         G
GAM3803 KIAA1918 5' CATTTCTCTTTGGGGAACA 86232
                                           CTCC C
                    CATTTCTC GGGG GCA
                    GTAAAGAG CCCC TGT
                        AAA T
GAM3803 MGC11335 3' CATTTCTCCTCAGGCCTCA 86233
                                             CG G
                    CATTTCTCCTC GGGC CA
                    GTAAAGAGGAG TCCG GT
                          GA
                                           CCGG G
GAM3803 NTN4 3' CATTTCCCCTTTAGCCAAG 86234
                    CATTTCTCCT GGC CAAG
                    GTAAAGGGGA TCG GTTC
                        AA__ _
GAM3803 PGRMC1 5' TTTCTCCTCCCGGACGC 86235
                                            G_{-}
                    TTTCTCCTCC GGGCGC
                    AAAGAGGAGG CCTGCG
                        GG
GAM3803 PPP1R1A 3' CATCTCTCTCCCACAGCA 86236
                                            C_ G
                    CATTTCTC TCCG GGCG
                    GTAGAGAG GGGT TCGT
                        AA G
GAM3803 PRO1855 3' CATTTCTCCTCATTCCTTCAGG 86237
                    CATTTCTCCTC
                                 CGGG
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GTAAAGAGGAG
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                        TAAGGAA
GAM3803 PTPRT 3' TTTCTCCTCCACATCCAAG 86238
                                          GGGCG
                    TTTCTCCTCCG CAAG
                    AAAGAGGAGGT GTTC
                        GTAG
GAM3803 RHOBTB3 3' CATTTCTCCCTTGCCAGCCAAG 86239
                                          ___ GG G
                    CATTTCTCCT CC GGC CAAG
                    GTAAAGAGGG GG TCG GTTC
                        AAC __ _
GAM3803 RNF8 3' ATTTCTCCTTAATACAAG 86240
                                         CCGG CG
                    ATTTCTCCT GG CAAG
                    TAAAGAGGA TT GTTC
                       A AT
GAM3803 VDAC3 3' CATTTCTCTTCACTTCCAGG 86241
                    CATTTCTC CT CCGGG
                    GTAAAGAG GA GGTCC
                       AAGT A
GAM3803 ZNF317 3' ATTTCTCCTAGCGTAA
                                        CCGG C
                                86242
                    ATTTCTCCT GGCG AA
                    TAAAGAGGA TCGC TT
GAM3803 LOC119146 5' TTTCTCCTGCGCTTGCGCA 86243 C GG
                    TTTCTCCT CG GCGCA
                    AAAGAGGA GC CGCGT
                       C GAA
GAM3803 LOC122769 3' CATTCCTCCTCTCCAGCAAG 86244
                                            CGGGGC
                    CATTTCTCCTC GCAAG
                    GTAAGGAGGAG CGTTC
                        AGGT
GAM3803 LOC129831 3' CATTTTTTCCTGACACAAG 86245
                                          CTCC GG
                    CATTT TCC GGCGCAAG
                    GTAAA AGG CTGTGTTC
                      AA__ A_
GAM3803 LOC146794 5' CATTTCTTCCTTTCCAGTGA 86246
                    CATTTCT CC TCCGG GG
                    GTAAAGA GG AGGTC CT
                       A AA A
                                          _CG C
GAM3803 LOC152940 3' TTTCTCCTTCTAAAAGCA 86247
                    TTTCTCCT C GGG GCA
```

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AAAGAGGA G TTT CGT
                        A AT _
GAM3803 LOC164356 5' ATTCCTCCTTTTCCATGAG 86248
                     ATTTCTCC TCCG GGG
                     TAAGGAGG AGGT CTC
                        AAA A
GAM3803 LOC165552 3' ATTTCTCCTTCCTCCGCA 86249
                                            GGGG
                     ATTTCTCCT CC CGCA
                     TAAAGAGGA GG GCGT
                        A AG
GAM3803 LOC168391 5' CACTTCTCTTTCGATGCCCAAG 86250
                                             CTC GG G
                     CATTTCTC CG GC CAAG
                     GTGAAGAG GC CG GTTC
                        AAA TA G
GAM3803 LOC197273 5' TTTCCCCTTCCAATGGGCGCAA 86251
        G
                     TTTCTCCT CCG GGGCGCAAG
                     AAAGGGA GGT CCCGCGTTC
                        A TA
                                  86252
GAM3803 LOC253955 5' CATTTCCCCTCTGCAC
                                            CGGG
                     CATTTCTCCTC GCGC
                     GTAAAGGGGAG CGTG
                         Α
GAM3803 LOC256529 5' CATTTCTCCACGGTTCCCGTGA 86253
        G
                     CATTTCTCC TCCG GGG
                     GTAAAGAGG
                                GGGC CTC
                        TGCCAA A
GAM3803 LOC56267 3' TTTCTCCTTTGCAATCAAG 86205
                                            CCGGG __
                     TTTCTCCT GCG CAAG
                     AAAGAGGA CGT GTTC
                        AA___ TA
GAM3803 LOC56270 3' CATTTCCCTCCACACCAGCG 86254
                                            T G__
                     CATTTC CCTCCG GGCG
                     GTAAAG GGAGGT TCGC
                          GTGG
GAM3803 LOC90719 3' CATTTCTCTGCCCGCATGCA 86255
                                             C_ GG_
                     CATTTCTC TCCG GCG
                     GTAAAGAG GGGC CGT
                        AC GTA
GAM3803 LOC92335 3' CATCTCTCTTCTGCGGAG 86256
                                            C __
                     CATTTCTC TC CGGGG
```

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GTAGAGAG AG GCCTC
                       A AC
                                            ____ G
GAM3803 LOC92558 3' CATCTCTCCTTTGACCCTGGG 86257
                    CATTTCTCCT CC GGG
                    GTAGAGAGGA GG CCC
                        AACT GA
GAM3803 LOC92703 3' CATTTCTCCCTCCCTAACA 86258
                                           _ GG_
                    CATTTCTCC TCC GGCG
                    GTAAAGAGG AGG TTGT
                       G GGA
GAM3804 ACVR1B 3' TACAGACACACACACACA 86261
                                        AA
                    TACA ACACACACA
                    ATGT TGTGTGTGT
                     CTG
GAM3804 ANKH 3' TACATAACATATACAGCATATA 86262 A CACAC
                    TACA AACA ACAGTATATA
                    ATGT TTGT TGTCGTATAT
                     A ATA
GAM3804 ARF4L 3' TACAGAGGACACACACAGCTTA 86263
                                          AAAC
                                                  Α
                     TACA ACACACAGT TATA
        TA
                    ATGT TGTGTGTCG ATAT
                     CTCC
                                          AA ___
GAM3804 BAZ2A 3' TACAGGGTCACACACACACACA 86264
                                                  G
                      TACA ACACACACA TATATA
        CATA
                    ATGT TGTGTGTGTGTGTAT
                     CCCAG
GAM3804 BCL11A 3' CACAAATAGCACACAGTGTAT 86265
                                          ACACA
                    TACAAA CACACAGT TAT
                    GTGTTT GTGTGTCA ATA
                      ATC
                             С
GAM3804 CASP8AP2 3' TACAGAAACACACATACATACA 86266
                                            _ C G
        TA
                     TACA AAACACACA ACA TATATA
                    ATGT TTTGTGTGT TGT ATGTAT
                          Α _
                     С
GAM3804 COL13A1 3' TACAAACACACACACAG 86267
                                         Α
                    TACAAA CACACACACAG
                    ATGTTT GTGTGTGTC
```

GAM3804 COL13A1 3' TACAAACACACACACAG 86267

TACAAA CACACACACAG

Α

ATGTTT GTGTGTGTC

| GAM3804 | COL13A1 3' TACAA | ACACACACACAG TACAAA CACACACA ATGTTT GTGTGTGT | | Α | |
|---------|------------------|---|---------|------|---|
| GAM3804 | COL13A1 3' TACAA | - AACACACACACAG TACAAA CACACACA ATGTTT GTGTGTGT | CAG | A | |
| GAM3804 | COL13A1 3' TACAA | ACACACACACAG TACAAA CACACACA ATGTTT GTGTGTGT | CAG | A | |
| GAM3804 | COL13A1 3' TACAA | - AACACACACACAG TACAAA CACACACA ATGTTT GTGTGTGT | CAG | Α | |
| GAM3804 | COL13A1 3' TACAA | - AACACACACACAG TACAAA CACACACA ATGTTT GTGTGTGT | CAG | A | |
| GAM3804 | CREBL2 3' CATAA | AACACACACAGACA CA AA ACACACACA | G ATATA | A C | Т |
| GAM3804 | CYP24 3' TACACO | GGACACACACACACACACACACACACACACACACACACA | CA | AA_ | |
| GAM3804 | DUOX1 3' TACAG | ACATGCACACACA TACA ACA CACACA IIII III IIIIIIIIIIIIIIII | ACA | AA | |
| GAM3804 | ERBB2IP 3' TACAA | CACACATACAATA TACA ACACACA AC IIII IIIIIII IIIIII ATGT TGTGTGTTG | AGTA | AA C | |
| GAM3804 | FMR2 3' TACAAA | GCAAACACACACGC TACAAA CA ACACAG | | A C | _ |

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ATGTTT GT TGTGTGT CG
                       СТ
                             G
GAM3804 FSTL1 3' TACAAAACTACACACACAG 86273
                     TACAAAAC ACACACACAG
                     ATGTTTTG TGTGTGTC
                        Α
GAM3804 GALR1 3' AAACACACATCAATATA
                                  86274
                                           CA
                     AAACACACA CAGTATA
                     TTTGTGTGT GTTATAT
GAM3804 GATM
             3' TAAAAATACACATACAGTAT 86275 C C C
                     A AAAA ACACA ACAGTAT
                     A TTTT TGTGT TGTCATA
                     T A A
GAM3804 GLDC
             3' TACAGAGATATACACAGTATAT 86276
                                           AAACACAC
                     TACA
                            ACACAGTATATA
         Α
                         ATGT
                            TGTGTCATATAT
                      CTCTATA
GAM3804 H1F0
            3' TACACAAACACACACATGCA 86277
                                               CA
                     TACA AAACACACACA GTA
                     ATGT TTTGTGTGTGT CGT
                      G
                            Α
GAM3804 MAP3K8 3' AAAACATACACAGTAT
                                  86278
                                         CAC
                     AAAACA ACACAGTAT
                     TTTTGT TGTGTCATA
                                          CAC
GAM3804 MTMR6 3' AAACACACAAATATAT
                                  86279
                     AAACACACA AGTATAT
                     TTTGTGTGT TTATATA
GAM3804 MTMR8 3' AAAACACACATACACATATA 86280
                                             C G
                     AAAACACACA ACA TATATA
                     TTTTGTGTGT TGT GTATAT
GAM3804 NDUFS2 3' TACACGAACATACACACAC 86281
                                           A_ __
                     TACA AAC ACACACA
                     ATGT TTG TGTGTGTGT
                      GC TA
GAM3804 PCDH11X 3' TACAAAATTTACACACAGT 86282
                                            CAC
                     TACAAAA ACACACAGT
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ATGTTTT TGTGTGTCA
                        AAA
GAM3804 PCDH11X 3' TACAAAATTTACACACAGT 86282
                                             CAC
                     TACAAAA ACACACAGT
                     ATGTTTT TGTGTGTCA
                        AAA
GAM3804 PCK1
             3' TACAAATACACATACACAAATA 86283
                                            _ C
                                                  Т
         TA
                      TACAAA ACACA ACACAG ATATA
                     ATGTTT TGTGT TGTGTT TATAT
GAM3804 PLAU
             3' AAACATACACACACATATA 86284
                                              G
                     AAACA ACACACA TATATA
                     TTTGT TGTGTGT GTATAT
GAM3804 RAB23 3' TAAAAACATATACACAATAT 86285 C
                                             CAC
                     A AAAACA ACACAGTAT
                     A TTTTGT TGTGTTATA
                      Т
                        ATA
GAM3804 RAB4A 3' ACAGGACATACAGTACATA 86286
                                          C C
                     ACA ACA ACAGTATATA
                     TGT TGT TGTCATGTAT
                      CC A
GAM3804 RB1
            3' AAAACAAGCACACAGTATA 86287
                                          CA
                     AAAACA CACACAGTATA
                     TTTTGT GTGTGTCATAT
                        TC
GAM3804 RDX
             3' CACAGAGTACACACACA 86288
                                          AA
                     TACA ACACACACA
                     GTGT TGTGTGTGT
                       CTCA
             3' CAAAATACACATGGAGTATA 86289
GAM3804 ROR2
                                           С
                                              CAC
                     CAAAA ACACA AGTATA
                     GTTTT TGTGT TCATAT
                          ACC
                       Α
GAM3804 RPS6KA5 3' TAAAAACATACACATAGC 86290 C
                                             С
                                               C
                     A AAAACA ACACA AGT
                     1 11111 1111 111
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A TTTTGT TGTGT TCG

TACAAA ACA CAGTATAT

AC CACA

A A

3' CACAAAGTACAATCCAGTATAT 86291

Т

GAM3804 SCO1

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GTGTTT TGT GTCATATA
                       CA TAG
GAM3804 SH3BP4 3' TACAGAAAACACACACAC 86292
                     TACA AAACACACACACA
                     ATGT TTTGTGTGTGTGT
                      CT
GAM3804 SIL
           3' AAAACACACTCATACTCAATA 86293
                                            ___ A
                     AAAACACAC AC CAGTA
                     TTTTGTGTG TG GTTAT
                        AGTA A
GAM3804 SLC19A2 3' TACAAAACTGCATACAGTA 86294
                                            ACA C
                     TACAAAAC CA ACAGTA
                     ATGTTTTG GT TGTCAT
                        AC A
GAM3804 SLC1A4 3' TACACAACACACATGTGTGTAT 86295
                                                CACA
        Α
                     TACA AACACACA GTATA
                     ATGT TTGTGTGT CATAT
                      G
                           ACACA
GAM3804 SLC20A2 3' TACACAACAATCAATACACAGT 86296
                                            A __ C_
         ATAT
                       TACA AACA CA ACACAGTATAT
                     ATGT TTGT GT TGTGTCATATA
                      G TA TA
GAM3804 SPF30 3' TACAAAAAGTACACACCA 86297
                                          С
                                               Α
                     TACAAAA ACACAC CA
                     ATGTTTT TGTGTG GT
                        TCA
GAM3804 STX7
            3' ACAGAATACACACACCTTA 86298
                                         A C
                                               AG
                     ACA AA ACACACAC TA
                     TGT TT TGTGTGTG AT
                      CA
                            GA
GAM3804 TCF8
             3' TACAAAACACACATCACA 86299
                     TACAAAACACACA CACA
                     ATGTTTTGTGTGT GTGT
                          Α
GAM3804 TEM7
             3' TACAAACACACACACAAACATA 86300
                                                 Т
                                            Α
                     TACAAA CACACACAG ATATA
                     ATGTTT GTGTGTGTTT TGTAT
GAM3804 CHCR
             3' CAAAACACTACAGTAT
                                 86301
                                          ACAC
                     CAAAACAC ACAGTAT
```

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GTTTTGTG TGTCATA
                         A_{-}
GAM3804 CLDN1 3' TACAAAACCACACTTACATGTA 86302
                     TACAAAAC CACAC ACA GTA
                      ATGTTTTG GTGTG TGT CAT
                          AA A
GAM3804 DKFZP434F091 3' TGAAAACACACACCTTAGT 86303 C
                                                    AC
                     A AAAACACACAC AGT
                     A TTTTGTGTGTG TCA
                      С
                           GAA
GAM3804 DKFZP586D0623 3' AAAACACACCAGCAT
                                       86304
                                                ACA
                     AAAACACAC CAGTAT
                      TTTTGTGTG GTCGTA
GAM3804 EHM2 3' ACAAAGCACACACTTGTAT 86305
                                               ACA
                     ACAAA CACACAC GTAT
                     TGTTT GTGTGTG CATA
                        С
                           AA_{-}
GAM3804 FLJ10305 3' TACAAGTACACACACAC 86306
                     TACAA ACACACACA
                      ATGTT TGTGTGTGTGT
                        CA
GAM3804 FLJ10856 3' CACAAAATACATACACATATA 86307
                                              CCG
                     TACAAAA ACA ACACA TATA
                      GTGTTTT TGT TGTGT ATAT
                        A
GAM3804 FLJ11850 3' CAAAGCACACACACACA 86308
                     CAAA ACACACACACAG
                      GTTT TGTGTGTGTC
                       CG
GAM3804 FLJ12666 3' ACACATACACACATATA
                                   86309
                                           C G
                     ACACA ACACA TATATA
                      11111 11111 111111
                      TGTGT TGTGT GTATAT
```

A _
GAM3804 FLJ13910 3' TACAATACACACATGCACA 86310 A __
TACAA ACACACA CACA
||||| |||||| ||||
ATGTT TGTGTGT GTGT
A AC

GAM3804 FLJ14743 3' CACAGAATACACACAGAATTAT 86311 A C CAG_ ATA TACA AA ACACACA TATATA

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CA
                            CTTA
GAM3804 FLJ20071 3' TACAACACACACACAG
                                  86312
                                         AA
                     TACA ACACACACAG
                     ATGT TGTGTGTGTC
GAM3804 FLJ20371 3' TACAAACACACACACACACACACA 86313
                                                  G
         Т
                     TACAAA ACACACACACA TATAT
                     ATGTTT TGTGTGTGTGT GTGTA
                       G
GAM3804 FLJ21276 3' TACACAAACACACACACA 86314
                     TACA AAACACACACACA
                     ATGT TTTGTGTGTGTGT
GAM3804 FLJ21302 3' TACACAACATACACAGAAGTA 86315
                                            A C C
                     TACA AACA ACACA AGTA
                     ATGT TTGT TGTGT TCAT
                      G A CT
GAM3804 GHITM
             3' AAAACACACATATAT
                                          CACAG
                                 86316
                     AAAACACACA
                                 TATAT
                     TTTTGTGTGT
                                ATATA
GAM3804 GT650
            3' CAAAACACACAATTCTATATA 86317
                                             CACAG
                     CAAAACACACA TATATA
                     GTTTTGTGTGT ATATAT
                         TAAG
GAM3804 HERPUD1 3' TACAAACACACATGCAG
                                    86318
                                               CA
                     TACAAA CACACA CAG
                     ATGTTT GTGTGT GTC
                          AC
GAM3804 HYPC
             3' ACAAAACACACGTACAT
                                  86319
                                           ACACA
                     ACAAAACACAC
                                  GTATAT
                     TGTTTTGTGTG
                                 CATGTA
GAM3804 JAM1
             3' TACACAACACACACAA 86320
                                         Α
                     TACA AACACACACACAG
                     ATGT TTGTGTGTGTTT
                      G
GAM3804 JAM1
             3' TACACAACACACACAA 86320
                                         Α
```

TACA AACACACACACAG

1111 11111111111111

GTGT TT TGTGTGT ATATAT

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ATGT TTGTGTGTGTTT
                       G
             3' TACACAACACACACAA 86320
GAM3804 JAM1
                                         Α
                     TACA AACACACACACAG
                     ATGT TTGTGTGTGTTT
                       G
GAM3804 JAM1
             3' TACACAACACACACAA 86320
                                         Α
                     TACA AACACACACACAG
                     ATGT TTGTGTGTGTTT
                      G
GAM3804 KIAA0143 3' TACAAAAGCACACAGT
                                  86321
                                           CACA
                     TACAAAA CACACAGT
                     ATGTTTT GTGTGTCA
                        С
GAM3804 KIAA0275 3' TACAAGGACACACAAACGT 86322
                                                CA
                     TACAA ACACACA AC GT
                     ATGTT TGTGTGT TG CA
                       CC
                            Τ_
GAM3804 KIAA0295 3' TACAAAACACACAACAATA 86323
                                              С
                     TACAAAACACACA ACAGTA
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GAM3804 KIAA0318 3' CACGACACATACAAAGTATA 86324
                                          AA C C
                     CA ACACA ACA AGTATA
                     GT TGTGT TGT TCATAT
                      GC A T
GAM3804 KIAA0472 3' ACACACACACATATATA
                                            G
                                   86325
                     ACACACACA TATATA
                     TGTGTGTGTGT ATATAT
GAM3804 KIAA0820 3' TACAAAGACACACACACA 86326
                     TACAAA ACACACACACA
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GAM3804 KIAA0831 3' TACAAAACACCAAATATA 86327
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                     TACAAAACAC CA AGTATA
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GAM3804 KIAA0978 3' CAAAATACACACACTAAATATA 86328
                                                 AGT
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CAAAA ACACACAC ATATA

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GTTTT TGTGTGTG TATAT
                           ATT
GAM3804 KIAA1069 3' AAACACACACACATTATA 86329
                                              G
                     AAACACACACACA TATA
                     TTTGTGTGTGTGT ATAT
                          Α
GAM3804 KIAA1423 3' TACAAACCTTGAACATAGTATA 86330
                                             ACACAC C
         TA
                      TACAAA ACA AGTATATA
                     ATGTTT TGT TCATATAT
                       GGAACT A
GAM3804 KIAA1484 3' TACAGACACACACACA 86331
                                          AA
                     TACA ACACACACACAG
                     ATGT TGTGTGTGTC
GAM3804 KIAA1493 3' ACAAAACATGCAGTCAGTGTAT 86332
                                              CA CA A
        Α
                     ACAAAACA CA CAGT TATA
                     TGTTTTGT GT GTCA ATAT
                        AC CA C
GAM3804 KIAA1550 3' AAACACATACACATATA
                                          C G
                                  86333
                     AAACACA ACACA TATA
                     TTTGTGT TGTGT ATAT
GAM3804 KIAA1615 3' AACACACATACACACTATATA 86334
                                               G
                     AACACAC ACACA TATATA
                     TTGTGTG TGTGT ATATAT
                        TA G
GAM3804 KIAA1958 3' TACACAGACACACACACATATA 86335
                                            AA
                     TACA ACACACACA TATA
                     ATGT TGTGTGTGT ATAT
                       GTC
GAM3804 MGC2817 3' TACAATATACACACATAAAGTA 86336
                                                  CAC
                     TACAA ACACACA AGTA
                     ATGTT TGTGTGT TCAT
                       ATA
                            ATT
GAM3804 MYO18B 5' TACAGACACACGCAGCACAT 86337
                                            AAAC
                                                  Α
                     TACA ACACAC CAGTATAT
                     ATGT TGTGTG GTCGTGTA
                           С
GAM3804 PRDM13 3' AAAACAACACACACACAT 86338
                                            С
                                               G
                     AAAACA ACACACA TATAT
```

TTTTGT TGTGTGT GTGTA

G

GAM3804 RDC1 3' TACAAAACACCACACAGATATA 86339 Т TACAAAACAC CACACAG ATATA ATGTTTTGTG GTGTGTC TATAT GAM3804 SERPINB7 3' AAACTACACAGCATAT 86340 **ACAC** AAAC ACACAGTATAT TTTG TGTGTCGTATA GAM3804 SNRK 3' TACAAAACATGCACAAT 86341 CACA TACAAAACA CACAGT ATGTTTTGT GTGTTA AC GAM3804 STK36 3' AAACACACACACACATA 86342 G AAACACACACACA TATA TTTGTGTGTGTGT GTAT GAM3804 THEA 3' ACACACACACAAAAATATA 86343 Т ACACACACAG ATATA TGTGTGTGTT TATAT GAM3804 TP53INP1 3' AAAACATACACACCTTCAT 86344 AG AAAACA ACACAC TAT TTTTGT TGTGTG GTA Α GAA GAM3804 TP53INP1 3' AAAACATACACACCTTCAT 86344 AG AAAACA ACACAC TAT TTTTGT TGTGTG GTA Α GAA GAM3804 USP25 3' AAACATACACATAGTATA 86345 C C AAACA ACACA AGTATA TTTGT TGTGT TCATAT AGAM3804 ZNF387 3' TACAAAACACATCAAGTA 86346 _ CAC TACAAAACACA CA AGTA ATGTTTTGTGT GT TCAT Α GAM3804 ZNF396 3' CAAGATACACACACACTCAATAT 86347 A__ A Α CAA ACACACA C CAGTATA

```
GTT TGTGTGT G GTTATAT
                      CTA
                            ΤА
GAM3804 LOC129401 3' CATACTGCGCACAGTATATA 86348 C A
                     CA AC CACAGTATATA
                     GT TG GTGTCATATAT
                      A ACGC
GAM3804 LOC130507 3' TACAAGATATCACACCAGTA 86349
                                             AACA A
                     TACAA CACAC CAGTA
                     ATGTT GTGTG GTCAT
                       CTATA
GAM3804 LOC145693 5' CAAGGTGCACACACAGATA 86350
                                            AACA
                                                   Т
                     CAA CACACAGATA
                     GTT GTGTGTGTC TAT
                      CCAC
GAM3804 LOC147077 3' AAAACACACAATACACTATATA 86351
                                               C G
                     AAAACACACA ACA TATATA
                     TTTTGTGTGT TGT ATATAT
                         TA G
GAM3804 LOC150368 3' TACAAAACACTGTAGCAATA 86352
                                              ACACA
                     TACAAAACAC CAGTA
                     ATGTTTTGTG GTTAT
                         ACATC
GAM3804 LOC150406 3' TACAAACACACACACACA 86353
                     TACAAA ACACACACACA
                     ATGTTT TGTGTGTGTGT
                       G
GAM3804 LOC151103 3' TACAAAACATTTACAGTA 86354
                                             CACAC
                     TACAAAACA ACAGTA
                     ATGTTTTGT TGTCAT
                         AAA
GAM3804 LOC151477 5' CAGAACACACATGAGTCTATA 86355 A
                                                CAC A
                     CA AACACACA AGT TATA
                     GT TTGTGTGT TCA ATAT
                          AC_ G
                      С
GAM3804 LOC151614 5' CAACACACACATGCACGCGCAT 86356
                                             Α
                                                 ___ A_
         Α
                     CAA ACACACA CAC GTATA
                     GTT TGTGTGT GTG CGTAT
                      G
                          AC CG
GAM3804 LOC151647 3' TACAATGCACACACAATA 86357
                                           AACA
                     TACAA CACACAGTA
```

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ATGTT GTGTGTGTTAT
                       AC__
GAM3804 LOC152633 5' CACAAAGTACACACACGTA 86358
                                              AC
                                                   Α
                     TACAAA ACACACAC GTA
                     GTGTTT TGTGTGTG CAT
                        CA
GAM3804 LOC154007 3' TACAAAACACAACATGACAGTA 86359
                                                 _ C_
         TA
                      TACAAAACACA CA ACAGTATA
                     ATGTTTTGTGT GT TGTCATAT
                          T AC
GAM3804 LOC154743 3' TACAAACATACGCACAACAT 86360
                                              ACA
                     TACAAA CA AC CACAGTAT
                     ATGTTT GT TG GTGTTGTA
                        A C
GAM3804 LOC154792 3' TACAAACACACACGCACACATA 86361
                                                   A G
                     TACAAA CACACAC CA TATATA
                     ATGTTT GTGTGTG GT GTGTAT
                           C _
GAM3804 LOC157621 3' TACACAGACACACACA 86362
                                            AA
                     TACA ACACACACA
                     ATGT TGTGTGTGT
                       GTC
GAM3804 LOC158014 5' TACACAAACACACACACA 86314
                     TACA AAACACACACACA
                     ATGT TTTGTGTGTGTGT
                       G
GAM3804 LOC201194 5' ACACACACACACATATA
                                              G
                                    86363
                     ACACACACA TATATA
                     TGTGTGTGTGT GTATAT
GAM3804 LOC219673 5' ACAAAACACAAAGTAT
                                             CACAC
                                    86364
                     ACAAAACACA AGTAT
                      TGTTTTGTGT TCATA
                         T_
GAM3804 LOC220758 3' TACAGAGATATACACAGTATAT 86276
                                              AAACACAC
         Α
                      TACA
                             ACACAGTATATA
                      Ш
                          TGTGTCATATAT
                     ATGT
                       CTCTATA_
GAM3804 LOC257319 3' CAGAACATACACACGCA
                                     86365
                                          A C
                     CA AACA ACACAC GTA
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11 1111 111111 111

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GT TTGT TGTGTG CGT
                      C A
GAM3804 LOC51101 3' AAACATACACACATTATATA 86366
                                               G
                     AAACA ACACACA TATATA
                     TTTGT TGTGTGT ATATAT
                       Α
GAM3804 LOC90148 3' TACAAAGCAACACACACACAGCA 86367
                                              Α_
         Т
                     TACAAA CA CACACA CAGTAT
                     ATGTTT GT GTGTGT GTCGTA
                       СТ
                            Т
GAM3804 LOC93356 5' AAAACACACGCACACAC
                                   86368
                                            A G
                     AAAACACAC CACA TAT
                     TTTTGTGTG GTGT GTG
                        С
GAM3804 LOC93444 3' CAAAACATACACACGCA
                                   86369
                                           С
                                               Α
                     CAAAACA ACACAC GTA
                     GTTTTGT TGTGTG CGT
GAM3805 ADAM12 5' TCGGGCCCGGCGGCGAGCG 86372
                                              TCC
                     TTGGGCCC GC GCG AGCG
                     AGCCCGGG CG CGC TCGC
                        СС
GAM3805 CNGB1
             3' GGGCGAGGGGCGCAGCGGGCG 86373
                                              CCTGCC
                     GGGC GCGCAGCG GCG
                     ||||
                       CGCGTCGC CGC
                     CCCG
                      CTCCC_
                               С
             3' TTGGGCCCTGTGCCTCCCAGCG 86374
GAM3805 FUT5
                                               GCG
                     TTGGGCCCT GCC CAGCG
                     AACCCGGGA CGG GTCGC
                        CA AGG
GAM3805 GPR30
             3' TTGGACCCTGCGGGGCGAGCG 86375
                                               CGCGCA
                     TTGGGCCCTGC
                                  GCGAGCG
                     AACCTGGGACG
                                   CGCTCGC
                         CCC_
GAM3805 PACE
             3' TTGGGCCCTGACGGGAGAGGCG 86376
                                               C CGCA
                     TTGGGCCCTG CG
                                    GCG
                     Ш
                     AACCCGGGAC GC
                                    CGC
                         T CCTCTC
GAM3805 RGS19
             3' TTGGGTCCTGCCACCTTGAG 86377
                                           С
                                                GCAGC
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TTGGG CCTGCCGC

GAG

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GAA
GAM3805 LOC124512 5' TTGGGCCCCGGGCGGGCG 86378
                                               CC CA
                     TTGGGCCCTG GCG GCG
                     AACCCGGGGC CGC CGC
                         C C
GAM3805 LOC56961 5' CTGGGTTCTCAGCGCAGCGGGC 86379
                                               CC GCC
                                                        Α
         G
                      TTGGG CT GCGCAGCG GCG
                     GACCC GA CGCGTCGC CGC
                       AA GT
GAM3806 JAG1
             3' AAGCCTTTTTGATCT
                                86382
                                        AGC C
                     AGGCCTTT TT GATCT
                     TTCGGAAA AA CTAGA
GAM3806 KIAA1594 3' ATAGGGCTTTTAGCTTCA 86383
                                          A C
                     ATA GGC TTTAGCTTCG
                     TAT CCG AAATCGAAGT
                      CA
GAM3806 POF1B 3' ATAAGGCTTTTAGCTTCA 86384
                                           C
                     ATAAGGC TTTAGCTTCG
                     TATTCCG AAATCGAAGT
GAM3806 LOC115749 5' CATCAACCCTTTGGCTTTGAT 86385
                                            AG AC
                     TAT AG CCTTT GCTT GAT
                     GTA TT GGAAA CGAA CTA
                      G G C A
GAM3807 EBI2
                                          AGATC
            3' TACATTGGGAGTTATTAAGA 86388
                     TACAT AGTTATTAAGA
                     ATGTA TCAATAATTCT
                       ACCC
GAM3807 FLJ13262 3' TCTATGCAGATCAGGTAGGTAA 86389
                                             CA
                                                  T T_
         GA
                      TCTA TAGATCAG TA TAAGA
                     AGAT GTCTAGTC AT ATTCT
                       AC
                            C CC
GAM3807 HSMPP8 3' TACATAGATGTGCTAGAAGAA 86390
                                              CA TT
                     TACATAGAT GTTA AAGAA
                     ATGTATCTA CGAT TTCTT
                         CA C_
GAM3807 KIAA0630 3' TCTCCATAGCCCAATATTAAGA 86391
                                            A AT T
         Α
                      TCT CATAG CAGT ATTAAGAA
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AACCC GGACGGTG CTC

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AGA GTATC GTTA TAATTCTT
                      G GG _
GAM3807 MLCB 3' TCTGTATAGACCACAGTTATT 86392
                                         AC
                    TCT ATAGAT CAGTTATT
                    AGA TATCTG GTCAATAA
                      CA GT
GAM3807 SNAP29 3' TCTACCAGTTATTGAGA 86393
                                         ATAGAT A
                    TCTAC CAGTTATT AGA
                    AGATG GTCAATAA TCT
                              С
GAM3807 LOC149464 5' TCTGCATAGAATCACTATAAGA 86394
                                           A _ G T
        Α
                     TCT CATAGA TCA TTAT AAGAA
                    AGA GTATCT AGT GATA TTCTT
                     С
                         T
GAM3807 LOC196477 3' TACATAGATCTGTTTATTAA 86395
                                             AG
                    TACATAGATC TTATTAA
                    ATGTATCTAG AATAATT
                        ACA
GAM3807 LOC254057 3' CTACATAGGTTCTAAGA 86396
                                           ATCA A
                    CTACATAG GTT TTAAGA
                     GATGTATC CAA GATTCT
GAM3807 LOC51030 3' TACATAGATTGCTTTAAGAA 86397
                                            CA A
                    TACATAGAT GTT TTAAGAA
                    ATGTATCTA CGA AATTCTT
GAM3807 LOC57117 5' TCTGCAAAGATCAGTTAT 86398
                                         A T
                    TCT CA AGATCAGTTAT
                    AGA GT TCTAGTCAATA
                     СТ
GAM3808 ADCY8 5' GCCGGGGGTGGCGGAGGG 86401
                    GCCGGGGGTG C AGGG
                    CGGCCCCCAC G TCCC
                        C CC
GAM3808 AP2M1 3' GGGCTGGTGCAAAGGGAA 86402
                    GGG GGTGCAA GGGAA
                     CCC CCACGTT CCCTT
                     GA
                         Т
GAM3808 AQP2
            3' AGGAAGGGGTGCAAGGGGAAG 86403
                                          CC
                    AG GGGGTGCAAGGG AAG
```

```
TC TCCCCACGTTCCC TTC
                      CT
                             C
GAM3808 CDX2 5' GCCGGGGGGCACGAAGGGAAAG 86404
                                               Τ ____
                     GCCGGGG GCA AGGGAAAG
                     CGGCCCCC CGT TCCCTTTC
                        _ GCT
GAM3808 FBXL7 3' GCCTGTGTGCGAGGGAAAG 86405
                                          GGGG A
                     GCC GTGC AGGGAAAG
                     CGG CACG TCCCTTTC
                      ACA C
GAM3808 FGD1
             5' GCCGGGGCCGCTGGGGA 86406
                                             _ AA
                     GCCGGGGGT GC GGGA
                     CGGCCCCCG CG CCCT
                        G AC
GAM3808 FOXE1 3' TAGCAGGGGGTGCTGGGG 86407
                                           С
                                               AA
                     TAGC GGGGGTGC GGG
                     ATCG CCCCCACG CCC
                      Т
                          AC
                                            CG TG __
GAM3808 GPC1
             3' CAGCTGGGGCACAGGAGGGAA 86408
                     TAGC GGGG CA AGGGAA
                     GTCG CCCC GT TCCCTT
                      A GT CC
GAM3808 GPX4
             3' TAGCCAGGGGTGGGG
                                            CAA
                                  86409
                     TAGCCGGGGGTG GGG
                     ATCGGTCCCCAC CCC
                          С
GAM3808 GTF2I 5' GCCGGGGGTGCCGAGGGGA 86410
                                              AA
                     GCCGGGGGTGC GGGA
                     CGGCCCCACG CCCT
                         GCTC
GAM3808 GTF2I 5' GCCGGGGGTGCCGAGGGGA 86410
                                              AA_{\underline{\phantom{a}}}
                     GCCGGGGGTGC GGGA
                     11111111111 1111
                     CGGCCCCACG CCCT
                         GCTC
GAM3808 HR
            5' GCCGAGTTGGGGGAAAG
                                  86411
                                         GG CAA
                     GCCGGG TG GGGAAAG
                     CGGCTC AC CCCTTTC
                       A_ C__
GAM3808 HRH2
             5' GCCAGGGGGTGGGGAA
                                  86412
                                             CAA
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GCC GGGGGTG GGGAA

```
CGG CCCCCAC CCCTT
                      Т
            3' TAGTCGGGGTAGTGGAGAG 86413 C __ CA
GAM3808 HSF4
                    TAG CGGGG GTG AGGG
                    ATC GCCCC CAC TCTC
                     A AT C
GAM3808 KLHL1 5' GCTGGAGATGCGCGAGGGA 86414 C
                    GC GGGGGTGC AGGGA
                    CG CCTCTACG TCCCT
                     Α
                         CGC
GAM3808 MAP1A 5' TAGCCGGAGGTGCAGGG 86415
                                             Α
                    TAGCCGGGGGTGCA GGG
                    ATCGGCCTCCACGT CCC
GAM3808 MPDU1 3' CAGCCGGGCTGAGGGA
                                  86416
                                          G G CA
                    TAGCCGG G TG AGGGA
                    GTCGGCC C AC TCCCT
                       _G __
GAM3808 NF1
            5' GCCGGGGGGGGGGGAA 86417
                                             ΤA
                    GCCGGGGG GC AGGGAA
                     CGGCCCCC CG
                                 TCCCTT
                        _ CCGCC
GAM3808 NPTX1
             3' GCCGGAGGTGCTGGCAGGGA 86418
                    GCCGGGGGTGC AGGGA
                    CGGCCTCCACG TCCCT
                         ACCG
GAM3808 OAS3
            5' CGCAGGTGCAAGGGGAAG 86419
                    CG GGGTGCAAGGG AAG
                    GC TCCACGTTCCC TTC
                     G
                          C
GAM3808 PRX
            3' GCCGGGGCTCCAAGAGGGAAAG 86420
                                             GTG __
                    GCCGGGG CA AGGGAAAG
                     CGGCCCC GT TCCCTTTC
                       GAG TC
GAM3808 PYGB
             3' GGATGGCTACAAAGGGAAAG 86421
                    GGG GG TGCAA GGGAAAG
                     111 11 11111 1111111
                    CCT CC ATGTT CCCTTTC
                      AG T
                                            G_ T A_
GAM3808 RANBP9 5' CAGCCGCTGAGGCAGGGGGA 86422
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TAGCCG GGG GCA GGGA

111111 111 111 1111

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GTCGGC CTC CGT CCCT
                       GA _ CC
                                          С
GAM3808 RARA 3' CAGCTGGGGGTGCAGGG 86423
                                              Α
                     TAGC GGGGGTGCA GGG
                     GTCG CCCCCACGT CCC
GAM3808 SGT
            3' GCCGGGAGGTCGACTCGGAAA 86424
                                             _ __ AA
                     GCCGGG GGT GC GGGAA
                     CGGCCC CCA TG CCTTT
                       T GC AG
GAM3808 SOX4
             3' GCTGGGGGTGCAGACAA 86425 C
                                             A G
                     GC GGGGGTGCA GG AA
                     11 111111111 11 11
                     CG CCCCACGT CT TT
                         G
GAM3808 TAP2 3' GCTGGGGAAGAGGGAAAG 86426 C TGCA
                     GC GGGGG AGGGAAAG
                     CG CCCCT TCCCTTTC
                      A TC__
GAM3808 C20orf110 3' GCAGGGCGAGAGGGAAAG 86427
                                           CG
                                               CA
                     GC GGGGTG AGGGAAAG
                     CG TCCCGC TCCCTTTC
                          TC
GAM3808 C20orf124 3' GCCGGGGGTAGCATTGGA 86428
                                              AG
                     GCCGGGGGT GCA GGA
                     CGGCCCCCA CGT CCT
                         T AA
GAM3808 DKFZP434N014 3' GCTGGGGGTGCAGAGGGAA 86429 C
                     GC GGGGGTGCA AGGGAA
                     CG CCCCACGT TCCCTT
                      Α
                          C
GAM3808 DKFZP434P0721 3' TAGCAGTAGGTGGGGGAAAG 86430
                                                 CGG CAA
                     TAGC GGGTG GGGAAAG
                     ATCG TCCAC CCCTTTC
                       TCA C_
GAM3808 DKFZP566B183 3' GGCAGGGCAGAGGGAAAG 86431 _ T _
                     GG GGG GCA AGGGAAAG
                     11 111 111 11111111
                     CC TCC CGT TCCCTTTC
                      G _ C
GAM3808 DKFZP566G1424 3' AGTCGGGAGTAGGGGGAA 86432 C
                                                   CAA
                     AG CGGGGGTG GGGAA
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TC GCCCTCAT CCCTT
                     Α
                         CC_
                                                G CA
GAM3808 DKFZp761G2113 3' TAGCCGGGGTGGGAAGG
                                      86433
                    TAGCCGGGG TG AGGG
                    ATCGGCCCC AC TTCC
                        ^{-} CC
GAM3808 FKBP4 3' ACTGGGAGAGGGAAAG
                                  86434 C TGCA
                    GC GGGGG AGGGAAAG
                    TG CCCTC TCCCTTTC
                     Α
GAM3808 FLJ11181 3' CAGTTGGGGGCCAGGGAA 86435
                                          CCG TA
                    TAG GGGG GC AGGGAA
                    GTC CCCC CG TCCCTT
                      AA G
GAM3808 FLJ11856 3' GGTGGCAGCATTGAGGGAAAG 86436 G _ _
                    GG GGT GCA AGGGAAAG
                    CC CCG CGT TCCCTTTC
                     A T AAC
GAM3808 FLJ14681 5' AGCCGGAACGTGCAAGGGA 86437
                    AGCCGGGG GTGCAAGGGA
                    TCGGCCTT CACGTTCCCT
GAM3808 FLJ20986 5' GCCAGGAAGCACAGGGAA 86438
                                           TG A
                    GCCGGGG G CA GGGAA
                    CGGTCCT C GT CCCTT
                       T GT
GAM3808 FLJ23360 5' GCGGGGGGCGCACCTAAGGGA 86439
                    GC GGGGGTGCA AGGGA
                    CG CCCCGCGT TCCCT
                     C
                          GGAT
GAM3808 KIAA0125 3' AGTCGGTCACAGAGGGAAAG 86440 C GGGT _
                    AG CGG GCA AGGGAAAG
                     TC GCC TGT TCCCTTTC
                     A AG_ C
GAM3808 KIAA0247 3' CAGCTGGGACTGGGAGGGAAAG 86441
                                             C G CA
                    TAGC GGGG TG AGGGAAAG
                    GTCG CCCT AC TCCCTTTC
                      A G CC
GAM3808 KIAA0255 3' GCTGGGGAGAAGAGGGAAAG 86442 C TGCA
                    GC GGGGG AGGGAAAG
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CG CCCCT TCCCTTTC
                     A CTTC
GAM3808 KIAA0303 5' TAGCCAGAGGAAGGGA
                                           TGC
                                  86443
                    TAGCCGGGG AAGGGA
                    ATCGGTCTCC TTCCCT
GAM3808 KIAA0427 5' AGTCGGGGGTGGGGAA
                                   86444 C
                                             CAA
                    AG CGGGGGTG GGGAA
                    TC GCCCCCAC CCCTT
                     Α
                         С
GAM3808 KIAA0590 3' TAGCAGGGGGTGCAGCCGCCAA 86445
        GG
                      TAGC GGGGGTGCA AGGG
                    ATCG CCCCACGT
                                    TTCC
                          CGGCGG
                      Т
GAM3808 KIAA0821 5' AGCCGGGGCTGGGGGAA 86446
                                            G CAA
                    AGCCGGGG TG GGGAA
                    TCGGCCCC AC CCCTT
                       G CC
GAM3808 KIAA1030 3' GCCATAGCAAGGGAAAG
                                         GGGGT
                                  86447
                    GCCG GCAAGGGAAAG
                    CGGT CGTTCCCTTTC
                      ΑT
GAM3808 KIAA1196 3' TAGCTGGGGGTGCTGGA
                                             AAG
                                  86448
                                         С
                    TAGC GGGGGTGC GGA
                    ATCG CCCCCACG CCT
                          Α
GAM3808 MDS018 3' CAGCTGGGTTGTAGGGAAAG 86449
                                           C GG CA
                    TAGC GGG TG AGGGAAAG
                    GTCG CCC AC TCCCTTTC
                      A A_ A_
GAM3808 MGC16386 3' GCCAGGGGTGCGGCAGGA 86450
                                              AA
                    GCCGGGGGTGC GGGA
                    CGGTCCCCACG TCCT
                         CCG
GAM3808 P114-RHO-GEF 3' GCCGAGGGGCACTGGCGAGGGA 86451
                                                _ ___ A
                     GCCG GGGGT GC AGGGAA
        Α
                    CGGC CCCCG CG TCCCTT
                      T TGAC C
GAM3808 RAB6B
             5' CAGCCGGGGCCGGGAGAG 86452
                                            G CA
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TAGCCGGGG TG AGGG

```
GTCGGCCCC GC TCTC
                       G CC
GAM3808 SMCR7 3' GCTGGGGGTGCAGCACAGAG 86453 C
                    GC GGGGGTGCA AGGG
                    CG CCCCACGT TCTC
                         CGTG
GAM3808 TNRC4 3' TAGCTGAGGGTGGAGGG
                                  86454
                                        С
                                            CA
                    TAGC GGGGGTG AGGG
                    ATCG CTCCCAC TCCC
                         С
GAM3808 TOMM40 3' ACCGGGGATGGGGAA
                                 86455
                                          CAA
                    GCCGGGGGTG GGGAA
                    TGGCCCCTAC CCCTT
GAM3808 USP20 3' GCTGGGAGGAAGGGAAAG 86456 C TGC
                    GC GGGG AAGGGAAAG
                    CG CCCTC TTCCCTTTC
                     A C__
GAM3808 LOC126364 3' TAGTCGGGAGTGGAGGG 86457
                                         С
                                             CA
                    TAG CGGGGGTG AGGG
                    ATC GCCCTCAC TCCC
                         С
GAM3808 LOC127703 3' GGGTTAAGTGAGGGAAAG 86458
                                         ___ CA
                    GGG GGTG AGGGAAAG
                    CCC TCAC TCCCTTTC
                     AAT
GAM3808 LOC131583 3' GCCGGGAGGTAGGGGAAAG 86459
                                            CAA
                    GCCGGG GGTG GGGAAAG
                    CGGCCC CCAT CCCTTTC
                      T C__
GAM3808 LOC132864 3' TAGCTGGGGTGAAAAG
                                  86460
                                         CG C
                    TAGC GGGGTG AAGGG
                    ATCG CCCCAC TTTTC
                      \mathsf{A}_{\_}
GAM3808 LOC133418 3' TAGCCTGGTGGGGAAA 86461
                                         GGG CAA
                    TAGCC GGTG GGGAAA
                    ATCGG CCAC CCCTTT
                      Α___
GAM3808 LOC145608 5' TAGTCGGGGGGGGGGA 86462
                                              CAA
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TAG CGGGGGTG GGGA

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ATC GCCCCCAC CCCT
                      Α
                          CC_
GAM3808 LOC145761 5' AGCTGCGGTGAGGGAAAG 86463 CGGG CA
                    AGC GGTG AGGGAAAG
                     TCG CCAC TCCCTTTC
                      ACG_ _
                                            GTGC
GAM3808 LOC146268 3' TAGCCGAGAAAGGGAAA
                                    86465
                    TAGCCGGGG AAGGGAAA
                     ATCGGCTCT TTCCCTTT
GAM3808 LOC146268 3' GGTGGGAAGCAGGGAAAG 86464
                                          _ T_ A
                    GG GGG GCA GGGAAAG
                     CC CCC CGT CCCTTTC
                     A TT
GAM3808 LOC163412 5' CAGCTGGGGGTGCTGTGGA 86466
                                            С
                                                AAG
                    TAGC GGGGGTGC GGA
                     GTCG CCCCCACG CCT
                      Α
                          ACA
GAM3808 LOC199745 3' AGCCGGGGGTGGCAGAAG 86467
                                              AG
                     AGCCGGGGGTG CA GG
                     TCGGCCCCAC GT TC
                         C CT
GAM3808 LOC200583 5' TAGCTGGGGGCGCTGGGG 86468
                                            С
                                                AA
                    TAGC GGGGGTGC GGG
                     ATCG CCCCCGCG CCC
                          AC
GAM3808 LOC200734 3' TAGCCAGGGGTTGGGGGGAA 86469
                                               GCAA
                    TAGCCGGGGGT GGGAA
                     ATCGGTCCCCA CCCTT
                         ACCC
GAM3808 LOC219347 3' GCTGGGACTGAAGGGAAAG 86470 C G C
                     GC GGGG TG AAGGGAAAG
                     CG CCCT AC TTCCCTTTC
                     A G_{-}
GAM3808 LOC220020 5' ACTGGAAGAGGGAGGGAAAG 86471
                                           C TGCA
                     GC GGGGG AGGGAAAG
                     TG CCTTC TCCCTTTC
                     A TCC_
GAM3808 LOC254314 5' TAGCCAGGGGCCTAGTGAGGGA 86472
                                                 GCA__
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TAGCCGGGGGT AGGGA

```
ATCGGTCCCCG TCCCT
                        GATCAC
GAM3808 LOC255098 3' TAGCCTGGTGGGGAAA 86461 GGG CAA
                    TAGCC GGTG GGGAAA
                    ATCGG CCAC CCCTTT
                      A___
GAM3808 LOC257152 3' TAGCCAGGGGTAGGGGG 86473
                                             CAA
                    TAGCCGGGGGTG GGG
                    ATCGGTCCCCAT CCC
                         CC
GAM3808 LOC57118 5' GCCGGGGGCGCGCTGGGGA 86474
                                              AA
                    GCCGGGGGTGC GGGA
                    CGGCCCCGCG CCCT
                        CGAC
GAM3808 LOC90719 3' CAGCTGGGGGTGAGGA 86475
                                         С
                                            CAA
                    TAGC GGGGGTG GGGA
                    GTCG CCCCCAC TCCT
                     Α
GAM3808 LOC90785 3' TAGCTGGGAGTGCAGGTGA 86476
                                          С
                                               Α
                    TAGC GGGGGTGCA GG GA
                    ATCG CCCTCACGT CC CT
                          _ A
GAM3808 LOC91960 3' AGCTGAGTGCAAGGGA 86477
                                        CGG
                    AGC GGGTGCAAGGGA
                    TCG CTCACGTTCCCT
GAM3808 LOC92230 5' TAGCCGGGGGTCGTAACAACAG 86478
                                               G
                    TAGCCGGGGGT GCAA GG
                    ATCGGCCCCCA TGTT TC
                        GCAT G
GAM3808 LOC93273 3' CAGCACAGTGCAAGGGAA 86479
                                          CGGG
                    TAGC GGTGCAAGGGAA
                    GTCG TCACGTTCCCTT
                      TG_
GAM3809 LIPA
           3' AAAGTTATCATTTTCTTGGA 86482
                                        A ACCG
                    AAAGTTAT CATTT TTGGA
                    TTTCAATA GTAAA AACCT
                        _ AG_
                                            C ACCG_
GAM3809 PTGFRN 3' AAGTTATATACTCCAAGTTTGG 86483
        Α
                    AAGTTATA ATTT TTGGA
```

```
TTCAATAT TGAG AACCT
                        A GTTCA
GAM3809 TRAF1 3' GTTATACATTGCTCAGTGG 86484
                                             TAC T
                     GTTATACATT CG TGG
                     CAATATGTAA GT ACC
                         CGA C
GAM3809 FRSB 3' AAGCTATAATTGTTGGA
                                          C TACC
                                  86485
                     AAGTTATA ATT GTTGGA
                     TTCGATAT TAA CAACCT
GAM3809 SLC26A8 3' AGTTATACATTTTATTTGA 86486
                                             ACCG
                     AGTTATACATTT TTGG
                     TCAATATGTAAA AACT
                          ATA
GAM3809 SLC26A8 3' AGTTATACATTTTATTTGA 86486
                                             ACCG
                     AGTTATACATTT TTGG
                     TCAATATGTAAA AACT
                          ATA
GAM3809 LOC196985 3' AAAGTTATATTTTATGGCTGTT 86487
                                               CATTTACC
         GGA
                       AAAGTTATA
                                   GTTGGA
                     IIIIII
                     TTTCAATAT
                                 CAACCT
                         AAAATACCGA
GAM3809 LOC201910 3' AAAGTTATACCATTCTGGA 86488
                                              ATTTACCG
                     AAAGTTATAC
                                  TTGGA
                     TTTCAATATG
                                  GACCT
                         GTAA
             3' TAATATTTTGTTGCTCAATACG 86491
GAM3810 RCN2
         Т
                     TAATATTT G TCGATACGT
                     ATTATAAA C AGTTATGCA
                        A AACG
GAM3811 GALNT7 3' CATCACAGTTGTTTTTT 86494
                                            Т
                     CGTCACAGTT TTTTTTT
                     GTAGTGTCAA AAAAAAA
GAM3811 GPRK5 3' TCTTGAGTCACATTTTTTTT 86495
                                           CAC
                                                G
                     TCT GTCACA TTTTTTTTT
                     AGA CAGTGT AAAAAAAAA
                      ACT
GAM3811 HNF3B
             3' CTCACAAAAGTTTTTTTTT 86496
                                           TCAC
```

CTCACG AGTTTTTTTTT

```
GAGTGT TCAAAAAAAAA
                       TT
GAM3811 HOXA3 3' TCGCGTTTACAGATTTTTTTT 86497 A C_ _
        TC
                     TC CGT ACAG TTTTTTTTC
                    AG GCA TGTC AAAAAAAAAAG
                     C AA T
GAM3811 HOXB3
            5' TCTCCCGGACCTGTTTTTTTT 86498
                                          A TC A_
        Т
                     TCTC CG AC GTTTTTTTTT
                    AGAG GC TG CAAAAAAAA
                      G C GA
GAM3811 IRS1
            3' GTCACAGTGCATTTTTTTT 86499
                    GTCACAGT TTTTTTTT
                    CAGTGTCA AAAAAAAA
                        CGT
GAM3811 KLRG1 3' TCTCACATTAGCATTTTTTTT 86500
                                           CACA
        Т
                     TCTCACGT GTTTTTTTT
                    AGAGTGTA TAAAAAAAAA
                        ATCG
GAM3811 MLLT3 3' TCTACAACAGTTTTTTTTT 86501
                                        C TC
                    TCT ACG ACAGTTTTTTTTT
                    AGA TGT TGTCAAAAAAAAA
GAM3811 OLFM1
             3' TCACATACACGAAGTTTTTTTT 86502
        TTC
                      TCACGT CAC AGTTTTTTTTC
                    AGTGTA GTG TCAAAAAAAAAAG
                       T CT
GAM3811 PHYH
             3' TCACTTTTACTGTTTTTTTT 86503
                                         GTC A
        С
                     TCAC AC GTTTTTTTTC
                    AGTG TG CAAAAAAAAAAG
                      AAAA A
GAM3811 SHOC2
             3' TCACTTTGCCAGTTTTTTTTT 86504
                                          GTCA_
        C
                     TCAC CAGTTTTTTTTC
                    AGTG GTCAAAAAAAAAAG
                      AAACG
GAM3811 SOX11
             3' TCAGTTCACAGTTTTTTTTT 86505
                                         CG
                    TCA TCACAGTTTTTTTTT
                    AGT AGTGTCAAAAAAAAA
                     CA
GAM3811 SOX12 3' TCACATGACGTTTTTTTTC 86506
                                          CA
```

TCACGT AC GTTTTTTTTC

```
AGTGTA TG CAAAAAAAAAAG
                        C _
GAM3811 TACC1 3' TCACTCCTGGTTTTTTTTT 86507
                                          G ACA
                     TCAC TC GTTTTTTTTT
                     AGTG AG CAAAAAAAAA
                       _ GAC
GAM3811 ATP1B4 3' GCCAGGCAGGTTTTTTTTC 86508
                     GTCA CAG TTTTTTTTC
                     CGGT GTC AAAAAAAAAAG
                       CC C
GAM3811 C1orf22 3' TCACAGAATGTTTTTTTTC 86509
                     TCACA GTTTTTTTTC
                     AGTGT CAAAAAAAAAG
                       CTTA
GAM3811 CNTNAP1 3' TCTCTACGTTGCAGGTTTTTT 86510
                                             CA T
                     TCTC ACGT CAG TTTTTT
                     AGAG TGCA GTC AAAAAA
                       A AC C
GAM3811 FLJ14129 3' TCTCAGGTTCCAATTTTTTTT 86511
                                            C CA
         Т
                      TCTCA GT CAGTTTTTTTTT
                     AGAGT CA GTTAAAAAAAAA
                       C AG
GAM3811 FLJ20004 3' TCCCACGTCCTTGTTTTTTTT 86512
                                              ACA
                      TCTCACGTC GTTTTTTTTT
         Т
                     AGGGTGCAG CAAAAAAAAA
                         GAA
GAM3811 FLJ20015 3' TCAACAACAGTTTTTTTT 86513
                                          TC
                     TCA CG ACAGTTTTTTTTT
                     AGT GT TGTCAAAAAAAAA
                      Т
GAM3811 GTF2E1 3' TCTTACGTCCATGTTTTTC 86514
                                          C A _
                     TCT ACGTC CA GTTTTTT
                     111 11111 11 1111111
                     AGA TGCAG GT CAAAAAG
                      A _ A
GAM3811 KIAA0391 3' TCTCCCGTCTTTTTTTTT 86515
                                          A ACAG
                     TCTC CGTC TTTTTTTTT
                     AGAG GCAG AAAAAAAAA
                       G
GAM3811 KIAA0494 3' TCATCTCACAGCCTTTTT 86516
                                          CG
                     TCA TCACAGTTTTTTT
```

```
AGT AGTGTCGGAAAAA
                      AG
GAM3811 KIAA1034 3' TCACTTCACTTTTTTTTT 86517
                                          G AG
                     TCAC TCAC TTTTTTTT
                     AGTG AGTG AAAAAAAA
                      A AA
GAM3811 KIAA1340 3' CGCTCTGACAGTTTTTTTTC 86518
                                           C___
                     CGT ACAGTTTTTTTTC
                     GCG TGTCAAAAAAAAAAG
                      AGAC
GAM3811 KIAA1673 5' TCTCACGCCTTTTTTT
                                  86519
                                          ACAGTT
                     TCTCACGTC
                                TTTTTTT
                     AGAGTGCGG
                                 AAAAAA
GAM3811 MGC4604 3' TCTCATTCACAGTTCGACTTC 86520
                                            CG
                                                  TT
                     TCTCA TCACAGTTT TTTT
                     AGAGT AGTGTCAAG GAAG
                       Α_
                            CT
GAM3811 PEG10 3' TCATGTCACAAGGGTTTTTC 86521
                                          С
                     TCA GTCACA GTTTTTT
                     AGT CAGTGT CAAAAAG
                         TCC
GAM3811 PTPRT
             3' CCACGTTTATGTTTTTTTC 86522
                                           CACA
                     TCACGT GTTTTTTTT
                     GGTGCA CAAAAAAAAG
                       AATA
                                          C ACA
GAM3811 SEMA5A 3' TCAGTCGTGTTCTTTTTTC 86523
                     TCA GTC GTTTTTTTTC
                     AGT CAG CAAGAAAAAAG
                      _ CA_
GAM3811 TGOLN2 3' TCTCAGGTCACAGTACTTTTTT 86524
                                            С
                                                 TT
         C
                      TCTCA GTCACAGT TTTTTTC
                     AGAGT CAGTGTCA GAAAAAAG
                       С
                           Τ_
GAM3811 TIEG
            3' CATCTTCAGTTTTTTTC 86525
                                        Α_
                     CGTC CAGTTTTTTTT
                     GTAG GTCAAAAAAAAG
                      AA
GAM3811 LOC130752 3' TCTCAGTTCAATTTTTTTT 86526
                                           C CA
                     TCTCA GT CAGTTTTTTTT
```

11111 11 111111111111

```
AGAGT CA GTTAAAAAAAA
                       _ A_
GAM3811 LOC146159 5' GCCACAAGGTTTTTTTTT 86527
                     GTCACA GTTTTTTTTT
                     CGGTGT CAAAAAAAAAA
                       TC
GAM3811 LOC220370 3' TCTCACGTTACATTATTTC 86528
                                            C GTT
                     TCTCACGT ACA TTTT
                     AGAGTGCA TGT AAAG
                        A AAT
GAM3811 LOC90538 3' GCTGCAGTTTTTTTTC 86529
                                         CA
                     GT CAGTTTTTTTTC
                     CG GTCAAAAAAAAAAG
                     AC
GAM3812 CNGA3 3' TCTCAGTTGTCAGCTTTTTT 86532
                                          C CA
                     TCTCA GT CAGTTTTTTT
                     AGAGT CA GTCGAAAAA
                       _ ACA
GAM3812 FGB
            3' TCCGTCATGGTTTTCCT
                                 86533 A
                                         CA
                     TC CGTCA GTTTTTTT
                     AG GCAGT CAAAAGGA
                      AC
GAM3812 GNAI1
             3' GTCCACAGGTTTTTTTT 86534
                     GTC ACAG TTTTTTTT
                     CAG TGTC AAAAAAAA
                      G C
GAM3812 GPRK5 3' TCTTGAGTCACATTTTTTTT 86495
                                          CAC
                                                G
                     TCT GTCACA TTTTTTTT
                     AGA CAGTGT AAAAAAAA
                      ACT A
GAM3812 IRS1
            3' GTCACAGTGCATTTTTTTTT 86535
        C
                     GTCACAGT
                                TTTTTTTC
                     CAGTGTCA AAAAAAAAG
                        CGTAAA
GAM3812 MUC4
             3' TCTCCGTCACAGTTGGAGATCA 86536
                                           Α
                                                TTTTTT
                     TCTC CGTCACAGTT
                                     TCA
                     AGAG GCAGTGTCAA
                                     AGT
                           CCTCT_
GAM3812 NPAT
             3' TCTTACATCACAAGTTTTT 86537
                     TCT ACGTCACA GTTTTT
```

```
AGA TGTAGTGT CAAAAA
                      Α
                          Т
GAM3812 SHOC2 3' TCACTTTGCCAGTTTTTTTT 86538
                                           GTCA
                     TCAC CAGTTTTTTTT
                     AGTG GTCAAAAAAAA
                       AAACG
                                            C AG
GAM3812 SOX12 3' TCACATGACGTTTTTTTTCA 86539
                     TCACGT AC TTTTTTTTCA
                     AGTGTA TG AAAAAAAAAGT
                        C CA
GAM3812 SP100
            3' TCTTACGTTGAAGTTTTTTTCT 86540
                                           C CAC
                     TCT ACGT AGTTTTTTTT
                     AGA TGCA TCAAAAAAAAA
                      A ACT
GAM3812 CNTNAP1 3' TCTCTACGTTGCAGGTTTTTT 86510
                                             CA T
                     TCTC ACGT CAG TTTTTT
                     AGAG TGCA GTC AAAAAA
                       A AC C
GAM3812 FLJ10719 3' TCTCAGTTACAGTTCTT
                                          CC
                                   86541
                     TCTCA GT ACAGTTTTT
                     AGAGT CA TGTCAAGAA
                       _ A
GAM3812 FLJ13942 3' TCTCATTCACAGTGTTT
                                          CG
                                               Т
                                   86542
                     TCTCA TCACAGT TTT
                     AGAGT AGTGTCA AAA
                            С
                                            C CA
GAM3812 FLJ14129 3' TCTCAGGTTCCAATTTTTTTT 86543
                     TCTCA GT CAGTTTTTTTT
                     AGAGT CA GTTAAAAAAAA
                       C AG
GAM3812 KIAA0391 3' TCTCCCGTCTTTTTTTTTTT 86544
                                            A ACAG
                     TCTC CGTC TTTTTTTT
                     AGAG GCAG AAAAAAAA
                       G AAAA
GAM3812 KIAA0494 3' TCATCTCACAGCCTTTTT 86516
                                          CG
                     TCA TCACAGTTTTTTT
                     AGT AGTGTCGGAAAAA
                      AG
GAM3812 KIAA1034 3' TCTACACATAGAGGTTTTTTTT 86545
                                              CACA
         Т
                      TCT CACGT GTTTTTTTT
```

```
AGA GTGTA CAAAAAAAA
                      T TCTC
GAM3812 KIAA1034 3' TCACTTCACTTTTTTTTTTC 86546
                                           G AG
                     TCAC TCAC TTTTTTTTC
                     AGTG AGTG AAAAAAAAG
                      A AAA
GAM3812 KIAA1946 3' TCACATCGACTTTTTTTT 86547
                                           _ AG
                     TCACGTC AC TTTTTTT
                     AGTGTAG TG AAAAAA
                       C AA
GAM3812 KLF12 3' TCCCATGTATTTTTTTC 86548
                                         C CACA
                     TCTCA GT GTTTTTTTC
                     AGGGT CA TAAAAAAAAG
GAM3812 LOC130752 3' TCTCAGTTCAATTTTTTTT 86526
                                           C CA
                     TCTCA GT CAGTTTTTTTT
                     AGAGT CA GTTAAAAAAAA
                       _ A_
GAM3812 LOC150054 3' TCTCAGCTTTTTTTTTC 86549
                                           C CACAG
                     TCTCA GT TTTTTTTTC
                     AGAGT CG AAAAAAAAAG
                       _ AA__
GAM3812 LOC169611 3' TCTCACTTTCCTTTTTTC 86550
                                           GTCACAG
                     TCTCAC
                             TTTTTTTTC
                     AGAGTG
                             GGAAAAAAA
                       AAA
                                            C GTTTTTT
GAM3812 LOC220370 3' TCTCACGTTACATTATTTC 86528
                     TCTCACGT ACA
                                  TTTC
                     AGAGTGCA TGT
                                   AAAG
                        A AAT
GAM3812 LOC255518 3' TCATGTTTCAGTTTTTCTC 86551
                                          C CA
                     TCA GT CAGTTTTTTT
                     AGT CA GTCAAAAAGAG
                      A AA
GAM3813 FBXL2 3' CAACACAGACTCCGAGCTG 86554
                                            TG__
                     TAACACAG CGAGCTG
                     GTTGTGTC GCTCGAC
                        TGAG
GAM3813 H3F3B 3' CAACACAATGAAAAGCTG 86555
                                            C_{-}
                     TAACACAGTG GAGCTG
```

GTTGTGTTAC TTCGAC

TT

| | TT | |
|-----------------|--|----------|
| GAM3813 HAGH | 3' TAACACAAGCCAAGGGCTG 86556 TAACACAG GC A GCTG | T G |
| | | |
| | ATTGTGTT CG T CGAC | |
| | _ G TCC | |
| GAM3813 MTR | 3' TAACACAGTGAAATCCTG 86557 | C G_ |
| | TAACACAGTG GA CTG | |
| | | |
| | ATTGTGTCAC TT GAC | |
| | T AG | |
| GAM3813 PDAP1 | 3' CAACACAGTCCGGGGCTG 86558 | G A_ |
| | TAACACAGT CG GCTG | _ |
| | | |
| | GTTGTGTCA GC CGAC | |
| | G CC | |
| GAM3813 RET | 3' CAACACAGCCAGAAGAGCTG 86559 | GC |
| | TAACACAGT GAGCTG | |
| | | |
| | GTTGTGTCG CTCGAC | |
| | GTCTT | |
| GAM3813 RET | 3' CAACACAGCCAGAAGAGCTG 86559 | GC |
| S., | TAACACAGT GAGCTG | <u></u> |
| | | |
| | GTTGTGTCG CTCGAC | |
| | GTCTT | |
| GAM3813 BET | 3' CAACACAGCCAGAAGAGCTG 86559 | GC |
| CANNOOTO TIET | TAACACAGT GAGCTG | <u> </u> |
| | | |
| | GTTGTGTCG CTCGAC | |
| | GTCTT | |
| GAM3813 7NF184 | 3' CAACACAGCAAAATGCTG 86560 | С |
| | TAACACAGTG GA GCTG | _ |
| | 111111111 11 1111 | |
| | GTTGTGTCGT TT CGAC | |
| | T A | |
| GAM3813 CXYorf1 | 3' AACACAGTGGCGCAGGCTG 86561 | Α |
| | AACACAGTG CG GCTG | _ · ` |
| | | |
| | TTGTGTCAC GC CGAC | |
| | C GTC | |
| GAM3813 KIAA05 | 27 3' TAACACAGTCCCAATGCTG 86562 | G |
| | TAACACAGT CGA GCTG | <u> </u> |
| | | |
| | ATTGTGTCA GTT CGAC | |
| | GG A | |
| GAM3813 PLAA | 3' TAACACAGCTTACCAACTG 86563 | G |
| 5 | TAACACAGT GC AGCTG | _ ~ |
| | | |
| | 11111111 11 11111 | |

```
ATTGTGTCG TG TTGAC
                        AA G
GAM3813 ULK2 3' TAACACAGGTGATAACTG 86564
                                          CG
                    TAACACAG TG AGCTG
                    ATTGTGTC AC TTGAC
                        C TA
GAM3813 LOC144744 3' CAACACAGTCCGGGGCTG 86558
                                             G A_
                    TAACACAGT CG GCTG
                     GTTGTGTCA GC CGAC
                        G CC
GAM3813 LOC154930 3' CAACACAGTAAAATCCTG 86565
                                             CG
                    TAACACAGTG GA CTG
                     GTTGTGTCAT TT GAC
                        T AG
GAM3813 LOC200093 3' AACACAGTGGCGCAGGCTG 86561
                                              _ A__
                    AACACAGTG CG GCTG
                    TTGTGTCAC GC CGAC
                        C GTC
GAM3813 LOC200609 5' TAACACAGTCAACTAGCTG 86566
                                             G
                    TAACACAGT GC AGCTG
                     ATTGTGTCA TG TCGAC
                        GT A
GAM3813 LOC91040 3' AACACAGTGGCGCAGGCTG 86561
                                             _ A__
                    AACACAGTG CG GCTG
                    TTGTGTCAC GC CGAC
                        C GTC
            3' GGCAGGGTGGAGGCGCTGCGC 86569
GAM3814 AK1
                                           AAGC
                    GGCA GGGGCGC GCGC
                     CCGT CTCCGCG CGCG
                      CCCAC
                              Α
GAM3814 AMMECR1 5' GCGGGGCGCGCGCGCCC 86570
                     GCGGGGCGCGCCCCT
                     CGCCCGCGCGCG GCGG
GAM3814 AMPD3
            5' GGCAGAGCGGAGCGGGCTGCT 86571
                                             Α
                                                 CGC C
                     GGCA AGCGGGGCG GC GCT
                     CCGT TCGCCTCGC CG CGA
                      С
                           CC_ A
GAM3814 BCR
            5' GCGAGGCGCGGGCGCTGCT 86573
                                             . C
                    GCGGGGCGC GCGC GCT
```

```
CGCTCCGCG CGCG CGA
                        CC A
            5' AGGCGGAGCGGGGCGCTCG 86572
GAM3814 BCR
                                          AA
                                                G
                     AGGC AGCGGGGCGC CG
                     TCCG TCGCCCCGCG GC
                      CC
                            Α
GAM3814 BCR
            5' AGGCGGAGCGGGGCGCTCG 86572
                                          AA
                                                G
                     AGGC AGCGGGGCGC CG
                     TCCG TCGCCCCGCG GC
                      CC
                            Α
GAM3814 BCR
            5' GCGAGGCGCGGGCGCTGCT 86573
                                            __ C
                     GCGGGGCGC GCGC GCT
                     CGCTCCGCG CGCG CGA
                        CC A
GAM3814 BGN
            3' GGCAGGCTGGGGAGACCGCT 86574
                                           AA CGCGC
                     GGCA GC GGGG GCCGCT
                     CCGT CG CCCC TGGCGA
                      C_ A TC___
GAM3814 CAPN2 5' GGCCAGGGCCCGGCGCGCTGCT 86575
                                            AAAG
                                                        C
                     GGC CGGGGC GCGCGCGCT
                     CCG GTCCCG CGCGCG CGA
                           GGC
            5' AGGCAGGGCGGGAGTGCGGGC 86576
GAM3814 CCND3
                                             AA _ C C
                     AGGCA GCGGG G GCG GC
                     TCCGT CGCCC C CGC CG
                          TA C
                       CC
            5' GCTGGAGCGCTGCGCCGC 86577
GAM3814 CD83
                     GC GGGGCGC GCGCCGC
                     CG CCTCGCG CGCGGCG
                     Α
                         Α
GAM3814 CHAC
             5' AGGCGGAGCGCGGTGCAGACC 86578
                                            AA GC C
                     AGGC AGCG GG GCG GCC
                     1111 | 1111 | 11 | 111 | 111
                     TCCG TCGC CC CGT TGG
                      CC GAC
GAM3814 CHAC
             5' AGGCGGAGCGCGGTGCAGACC 86578
                                            AA G C C
                     AGGC AGCG GG GCG GCC
                     TCCG TCGC CC CGT TGG
                      CC GAC
                                              AAA G C_ _
GAM3814 CSNK1E 5' AGGCGGGGCGGGCCGTGGCACC 86579
```

AGGC GCGGG CG GCGCC GCT

TGCT

```
TCCG CGCCC GC CGTGG CGA
                      CCC G AC A
GAM3814 DYRK1A 5' GCGGGGCGCTCGCGCCGCT 86580
                     GCGGGGCGC GCGCCGCT
                     CGCCCGCG CGCGGCGA
                        AG
GAM3814 FACL4 5' GGCGGAGCGGGGGCGCGC
                                    86581
                                          AA
                                               С
                     GGC AGCGGGG GCGCGC
                     111 1111111 111111
                     CCG TCGCCCC CGCGCG
                      CC
GAM3814 FACL4
             5' GGCGGAGCGGGGGCGCGC 86581
                                               C
                                          AA
                     GGC AGCGGGG GCGCGC
                     CCG TCGCCCC CGCGCG
                      CC
GAM3814 HIP1
            5' AGCAGAGCACTGCGTTGC 86582
                                           CC
                    AGCGGGGCGC GCG GC
                    TCGTCTCGTG CGC CG
                        A AA
GAM3814 MADD
             5' GGCAGAGGGGGGGCGCGCG 86583
                                          A C
                     GGCA AG GGGGCGCGCG
                     CCGT TC CCCCGCGCGC
                      CC
GAM3814 MADD
             5' GGCAGAGGGGGGGGCGCG 86583
                                           A C
                     GGCA AG GGGGCGCGCG
                     CCGT TC CCCCGCGCGC
                      CC
                                          A C
GAM3814 MADD
             5' GGCAGAGGGGGGGCGCGC 86583
                     GGCA AG GGGGCGCGCG
                     CCGT TC CCCCGCGCGC
                      CC
GAM3814 MAF
            5' AGGCAGGCGCGCGCGCGCGTC 86584
                                            AA G
        CGCT
                       AGGCA GCGG GCGCG CG CCGCT
                     TCCGT CGCC CGCGC GC GGCGA
                       CC G CA
GAM3814 MAP4K2 5' GCGGGGCGGGCGCCCGTGGCT 86585
                                              С
                     GCGGGGCG GCGCC GCT
                     CGCCCGC CGCGG CGA
                        C GCAC
GAM3814 MGAT1
             5' AGGCGGGGCGGGCGGGCGGA 86586
                                              AAA
                                                    C_ CC
        CT
                      AGGC GCGGGGCG GCG GCT
```

```
CCC
                           CC C
                                        AAAG CG
GAM3814 MMP25 5' GGCCAGGGTCGCGCCGC
                                  86587
                    GGC CGGGG CGCGCCGC
                    CCG GTCCC GCGCGCG
                          Α
GAM3814 MYO5A 5' GGCGGGGCGGGGGGGGGCGCC 86588
                                           AAA
                                                 C_{-}
                    GGC GCGGGGCG GCGCC
                    111 11111111 11111
                    CCG CGCCCCGC CGCGG
                     CCC
                           CC
GAM3814 NRXN1 5' AGCGCGGAGCGGGTGGCTGCT 86589
                                          AAA
                                                CGC C
                    GGC GCGGGGCG GCGCT
                    TCG CGCCTCGC CG CGA
                          CCAC A
GAM3814 PABPC4 5' GGCAGGCCGGGGCGCGGGGCT 86590
                                           AAG
                                                  CGCC
                    GGCA CGGGGCGCG GCT
                    CCGT GCCCCGCGC CGA
                     CCG
                            CC_
GAM3814 PCNA 5' GGCGGAGTGGCAACACGCCGC 86591
                                          AA C C
        Т
                    GGC AG GG GGCG GCGCCGCT
                    CCG TC CC TTGT TGCGGCGA
                     CC A G
                                           C C
GAM3814 PDGFRB 5' GCAGGGCGAGCACAGGCT 86592
                    GCGGGGCG GCGC GCT
                    CGTCCCGC CGTG CGA
                       T TC
GAM3814 POU3F1 3' AAGCGGGGTGGGGCGCATCC 86593
                                            C___
                    AAGCGGGG GCGCG CC
                    TTCGCCCC CGCGT GG
                       ACCC A
GAM3814 PPP3CC 5' GGCTAAGGCGGGGAACACCGCT 86594
                                           _ A CGC
                    GGC AA GCGGGG GCGCCGCT
                    CCG TT CGCCCC TGTGGCGA
                     A C
                         T__
GAM3814 PPP5C
             3' AGGCGCAGGCGGGCCCCCCTG 86595
                                           AAA
                                                 GCGCG _
                     AGGC GCGGGGC CC GCT
        CT
                    TCCG CGCCCCG GG CGA
                     CGTC
                            GGG__ A
GAM3814 REV3L 5' GGGCGGGGCGGTGTAGGCGCTG 86596 CAAA C____ C
        CT
                     G GCGGGGCG GCGC GCT
```

TCCG CGCCCCGC CGC TGA

```
C CGCCCCGC CGCG CGA
                         CACATC A
GAM3814 ROBO1 5' AGGCAGAAGCGCAGTAGTGCCG 86597 G CGCGC
                   AGGCA AAGCG GG GCCG
                   TCCGT TTCGC TC CGGC
                     C G ATCA
GAM3814 SCAP1 5' AGGCGGGACGGGCGCGGGCC 86598
                                          AAA
                                                C
                   AGGC GCGGGGCGCG GCC
                   TCCG TGCCCCGCGC CGG
                     CCC
                           C
GAM3814 SDC1
            3' GGCGGAGGGGCGCATGGCT 86599 AA C
                                              CGCC
                   GGC AG GGGGCGCG GCT
                   CCG TC CCCCGCGT CGA
                    CC
                          AC
GAM3814 SLIT3 5' GGCGGAGCGGGCGCTCC 86600
                                      AA
                                            GCG
                   GGC AGCGGGGCGC CC
                   CCG TCGCCCCGCG GG
                    CC
                         Α___
GAM3814 SORL1 5' GGCCGGGACCGCGCGCGCGCT 86601
                                         AAAG _
                   GGC CGGG GCGCGCCGCT
                   CCG GCCC CGCGCGCGCGA
                        TGG
GAM3814 TGIF 5' AGGCAAGGCGGGGGTCTAGCGG 86602 A C_____ CGC
        CGCG
                      GCAA GCGGGG GCG CG
                   CGTT CGCCCC
                                CGC GC
                     С
                        CAGAIIIT CGC
          5' GGCGGAGCGCGCGCGTGGGGC 86603
                                        AA G CGCC
GAM3814 UBTF
        Т
                    GGC AGCG GGCGCG GCT
                   CCG TCGC CCGCGC CGA
                    CC G ACCC
GAM3814 C20orf108 5' AGGCGCAGCACCCGCGCCGCT 86604
                                         AAA G G
                   AGGC GCGG GC CGCGCCGCT
                   TCCG CGTC TG GCGCGGCGA
                      _ G G
GAM3814 C22orf4 3' AGGCAGGTGGGGCGCCC 86605
                                       AA CG C
                   AGGCA G GGG GCGCGCC
                   TCCGT C CCC CGCGCGG
                      __ CA __
GAM3814 Cab45 3' GGCGGCGCGGGGCGCGGCCG 86606
                                        AAA
                                               C
                   GGC GCGGGGCGCG GCCG
```

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CCG CGCCCCGCGC CGGC
                      CCG
GAM3814 CDC42BPB 3' GGCGGGGGGGGGGGGTGGGGTAGCG 86607 AA C CGC
        GCGCGC
                         GCGGGG
                                  GCG CGC
                     \parallel \parallel \parallel \parallel
                             CGC GCG
                     CGCCCC
                    CC ACCCCAIIIT CGC
GAM3814 DEPC-1 5' GGCGGAGCCGGGCGCCCG 86608 AA G
                                                  G
                    GGC AGC GGGCGCGC CCG
                    CCG TCG CCCGCGCG GGC
                     CC G
GAM3814 DKFZP564O1863 5' AGGCAGGGCGGGGCCCTAGCGG 86609
                                                 AA ____ CGC
        CGCG
                       GCA GCGGGGC GCG CG
                    CGT CGCCCCG CGC GC
                     CC
                          GGAIIIT CGC
GAM3814 DZIP1 5' GCGGGTCGACTGGCGCCGCT 86610
                                          G ___
                    GCGGG CG C GCGCCGCT
                    CGCCC GC G CGCGGCGA
                      A TAC
GAM3814 FLJ12442 5' AGCCAGCTGGGCGCGCG
                                   86611
                                        AA G
                    GGC AGC GGGCGCGCG
                    TCG TCG CCCGCGCGC
                     G A
                                                 G C___
GAM3814 FLJ21839 3' GGCAGAGCGGGGCCGTGGGGGC 86612
                                             Α
        С
                     GGCA AGCGGGGC CG GCC
                    CCGT TCGCCCCG GC CGG
                          ACCCC
                      С
GAM3814 FLJ21916 5' AGGCGCGGGCGGGCTCCGCCGC 86613
                                             AAA GC G
        Т
                     AGGC GCGGG GC CGCCGCT
                    TCCG CGCCC CG GCGCGA
                          GCC AG
GAM3814 GDF10 5' GGCGGGGCGGGCGGCCGGCT 86614
                                            AAA
                                                 CGC _
                    GGC GCGGGGCG GCCG CT
                    CCG CGCCCCGC CGGC GA
                     CCC
                            С
GAM3814 KATNB1 3' GGCAAAGCTGGGCAGCTATTGC 86615
                                             G C GCC
        Т
                     GGCAAAGC GGGCG GC GCT
                    CCGTTTCG CCCGT CG CGA
                       A _ ATAA
GAM3814 KIAA0844 5' GGCGGAGCGAGGCGCGGC 86616
                                          AA
                    GGC AGCGGGGCGCG GC
```

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CCG TCGCTCCGCGC CG
                      CC
                                                 CGC G _
GAM3814 KIAA1857 3' GGCCGGGCGGGGGGCCCTGCT 86617 AAA
                    GGC GCGGGG GC CC GCT
                    CCG CGCCCC CG GG CGA
                      GCC C_ _ A
GAM3814 LAT1-3TM 5' AGCGAGGATTGTGCGCGCCGCT 86618
                                              C___
                    AGCGGGG GCGCGCCT
                    TCGCTCC CGCGCGGCGA
                       TAACA
GAM3814 MGC16385 5' GGCAGGGCGAGGCTGCGC 86619
                                                GC
                                           AA
                    GGCA GCGGGGC GCGC
                    1111 1111111 1111
                    CCGT CGCTCCG CGCG
                      CC
                           Α
GAM3814 MGC19595 5' GGAAAGGTGGGGCGCGC 86620 C C
                    GG AAAG GGGGCGCGCG
                    CC TTTC CCCCGCGCGC
                     _ CA
GAM3814 MGC3047 3' AGGAAAGCGGGACCAGCCGCT 86621
                                                 GC
                    AGG AAAGCGGGGC CG GCCGCT
                    TCC TTTCGCCCTG GT CGGCGA
GAM3814 MGC3279 5' AGGCGAACGGGGCGTCC
                                   86622
                                          AA
                                               CGCG
                    AGGC AGCGGGGCG CC
                    TCCG TTGCCCCGC GG
GAM3814 ODC-p 5' GGCCAGAGCCAGGCGCGCTGC 86623
                                           AA G
                    GGC AGC GGGCGCGC GC
                    CCG TCG TCCGCGCG CG
                      GTC G
                             Α
GAM3814 RNF10 5' AGGCGGAGCGGGCGGC
                                   86624
                                         AΑ
                                               С
                    AGGC AGCGGGGCG GC
                    1111 11111111111111
                    TCCG TCGCCCCGC CG
                      CC
GAM3814 SCAP
            5' GGCGGAGCGCGCGCGCT 86625
                                           AA G C C
                    GGC AGCG GGCG GCT
                    CCG TCGC CCGC CGCG CGA
                     CC G A _
GAM3814 SEPT6 5' GCGGATTTAACGCGCCGCT 86626
                                          GC__
                    GCGGG GCGCGCCGCT
```

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AAAT
CT
                    AGGC GCGG GGCGCT
                   TCCG CGCC CCGC GC CGGCGA
                     C_ GC C_
                                             C____ CGC
GAM3814 TUBB5 3' GGTGAAGCGGGGCTCCTAGCGG 86628 CA
        CGCG
                      AAGCGGGG
                                GCG CG
                    \parallel \parallel \parallel \parallel
                    TTCGCCCC
                               CGC GC
                        GAGGAIIIT CGC
                   AC
GAM3814 LOC145173 5' GGAGCGGAGCTGCGCCGC 86629 A
                                            GC
                   A AGCGGGGC GCGCCGC
                   C TCGCCTCG CGCGGCG
                    С
                       Α
GAM3814 LOC145376 5' GGCGCGGAGCGGGGCGGGGCGT 86630
                                           AA
        CGCT
                     GGC AGCGGGGCG GCG CGCT
                   CCG TCGCCCCGC CGC GCGA
                    CGCC
                           CC A
GAM3814 LOC145989 3' AGCGAGGCGGGGTGCACGGTCT 86631
                                                 CCG
                                           AAA
                                               С
                   GGC GCGGGG GCGCG CT
                   TCG CGCCCC CGTGC GA
                    CTC
                        A CA
GAM3814 LOC146108 5' AGGCGCGGGAGCTTGCGTGCTG 86632
                                           AAA _ _ C C
        CT
                    AGGC GCGGG GC GCT
                   TCCG CGCCC CG CGC CGA
                         T AA A A
GAM3814 LOC150384 5' AGTAACAGCTCGCGCGCGCTGC 86633 GCAA GGG
        Т
                    AG AGC GCGCGCGCGCT
                   TC TCG CGCGCGCGCGA
                    ATTG AG
GAM3814 LOC157586 5' AGGCTGGGCGGGGCGCGC 86634
                                          AAA
                   AGGC GCGGGGCGCGCG
                   TCCG CGCCCGCGCGC
                     ACC
GAM3814 LOC200014 3' AGGCAGAGCTGGGGTGACG 86635
                                          A _ C_
                   AGGCA AGC GGGG GCG
                   TCCGT TCG CCCC TGC
                     C A AC
                                           AA_{-}
GAM3814 LOC201549 5' GGCCGGAGCGGGCGGCGGCT 86636
                                                 C CC
```

GGC AGCGGGGCG GCT

CGCCT TGCGCGGCGA

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CCG TCGCCCCGC CGC CGA
                      GCC
                            С
GAM3814 LOC203068 5' AGGCTGGGCGGGGCGCGCG 86634
                                            AAA
                    AGGC GCGGGGCGCGCG
                     TCCG CGCCCCGCGCGC
                      ACC
GAM3814 LOC254552 5' AGGCGGGGGGGGGGCGCTCA 86638
                                            AAA
                                                   G
                    AGGC GCGGGGCGCCG
                     TCCG CGCCCGCG GT
                      CCC
                            Α
GAM3814 LOC254552 5' GGCGAGGCGGGGGGGGGGCGC 86637
                                             AAA
                                                   C_{-}
                     GGC GCGGGGCG GCGC
                     CCG CGCCCCGC CGCG
                      CTC
                            CC
GAM3814 LOC51063 5' GGCAGCGGCGGCCTCCGCCG 86639
                                            AA GCG
                    GGCA GCGG GGC CGCCG
                     CCGT CGCC CCG GCGGC
                      __ G GAG
GAM3814 LOC51279 3' GGCACAGGTGGGGTGTCTAGCG 86640 A C_ C_____ CGC
        GCGCGC
                         AG GGGG
                                   GCG CGC
                     11 1111
                          TC CCCC
                               CGC GCG
                     G CA ACAGAIIIT CGC
GAM3814 LOC90630 5' GGCAGAGCGGGGCGCGCA 86641
                                           Α
                     GGCA AGCGGGGCGCGCG
                     CCGT TCGCCCCGCGCGT
GAM3814 LOC91208 5' GGCAGAGCGGGGCGCGCA 86641
                     GGCA AGCGGGGCGCGCG
                     CCGT TCGCCCCGCGCGT
                      C
            3' TAGAAATGGCTGTAAATG 86644
                                          ATTT C A
GAM3815 ESR1
                     TGGAAATGG CTG AAAT G
                     ATCTTTACC GAC TTTA C
                           _ A C
GAM3815 GNRH1
             5' TGGTAAATTATACTGCAAATGG 86645
                                           _ GGATTT
                     TGG AAAT CTGCAAAT GA
        Α
                     ACC TTTA
                              GACGTTTA CT
                      A ATAT__
                                С
GAM3815 GRM6
             3' TGGAGATACCCTGCAAGTAGA 86646
                                           AATG _
                    TGGA GAT TTCTGCAA TAGA
```

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ACCT CTA GGGACGTT ATCT
                       ___ T
                              C
GAM3815 RFX2 3' TGGAGATGGGTTCCTGCA 86647
                                        A A
                    TGGA ATGG TTTCTGCA
                    ACCT TACC AAGGACGT
                      C
            3' TGGAACTCCACTGCAAATGGA 86648
GAM3815 TCN1
                                          ATGGATTT
                    TGGAA CTGCAAAT GA
                       11111
                    ACCTT
                           GACGTTTA CT
                      GAGGT
                               С
GAM3815 TLL1
            3' TGGAAATGGATTTTCTTCATAG 86649
                                             _ GCAA
        Α
                     TGGAAATGGATTT CT ATAGA
                    ACCTTTACCTAAA GA TATCT
                         A AG
GAM3815 BRAG 3' TGGGGACTGTCCCTGCAA 86650
                                        AAAT
                    TGG GGATT TCTGCAA
                    ACC CCTGA GGACGTT
                           CAG
GAM3815 MGC20255 3' TGGAAATGTACAAGTA
                                          GATTTC A
                                  86651
                    TGGAAATG
                              TGCAA TA
                    ACCTTTAC
                              ATGTT AT
GAM3815 PRRG1 5' GGAGGTGGATTTCTTTCTCTAA 86652
                                         AA
                                                GCAAA
                     GGA TGGATTTCT TAGA
        Α
                    CCT ACCTAAAGA ATTT
                     CC
                           AAGAG
            3' TGGGAATGGACTTCTGTCA 86653
GAM3815 UPB1
                    TGG AATGGATTTCTG CA
                    ACC TTACCTGAAGAC GT
                     С
                          Α
GAM3815 ZNF282 3' GAAATGGATAACGGATAG 86654
                                           TTCT AA
                    GAAATGGAT GC ATAG
                    CTTTACCTA TG TATC
                        T___ CC
GAM3815 LOC151124 5' GGTGGATTTCTGAACTCAG 86655 AAA
                                                 CAAA
                    GG TGGATTTCTG TAG
                    CC ACCTAAAGAC GTC
                           TTGA
GAM3815 LOC151278 5' GATTTCCTTTCTGCAAATGGA 86656 AATGGA
                    GA TTTCTGCAAAT GA
```

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CT
                         AAAGACGTTTA CT
                      AAAGG_
                                С
GAM3815 LOC157807 5' TGGGAATGTATTTCTGCA
                                   86657
                                          A G
                     TGG AATG ATTTCTGCA
                     ACC TTAC TAAAGACGT
                      C A
GAM3815 LOC201685 3' TGGGAATGGATTTCTGGC 86658
                                           Α
                     TGG AATGGATTTCTG C
                     ACC TTACCTAAAGAC G
                      С
                            С
GAM3815 LOC221683 5' TAGGGATGGATTTCTGCA 86659
                                           AA
                     TGG ATGGATTTCTGCA
                     ATC TACCTAAAGACGT
                      CC
GAM3815 LOC222234 3' TGGAAGTAGATTTCTTCCCAGA 86660
                                                   GCAAA
                     TGGAA TGGATTTCT TAGA
                     ACCTT ATCTAAAGA
                                     GTCT
                       С
                            AGG
GAM3816 MEOX2 3' AAGGATCATTTATTAAACACA 86663
                                              G
                     AAGGATCATT ATTAA CGCG
                     TTCCTAGTAA TAATT GTGT
GAM3816 PDE4A 3' AAGGATTATTGATCAACG 86664
                                           C
                     AAGGAT ATTGATTAACG
                     TTCCTA TAACTAGTTGC
GAM3816 MGC12992 5' AAGGAGCGGGCGCAGCGCGGTT 86665
                                               TCATTGAT A
         Т
                     AAGGA
                              TA CGCGGTTT
                     TTCCT
                             GT GCGCCAAA
                       CGCCCGC_ C
GAM3816 LOC221184 5' AGGTTGTTGATCGCGGTT 86666
                                           ATCA TAA
                     AGG TTGAT CGCGGTT
                     TCC AACTA GCGCCAA
                      AAC_
GAM3817 GPC6
             5' TGCGTGGAGGTATGTGTTG 86669
                                           _ C__
                     TGTG GGA ATGTGTTG
                     ACGC CCT TACACAAC
                       A CCA
GAM3817 SR-BP1 3' TGTGTGTGTGTGTGTATGTGTT 86670
                                            AATAT GGAC
                      TGT TGTG ATGTGTTG
         G
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CACAC ACA
GAM3817 LOC150622 5' TGGGATATTGTGGGGCTCTGTT 86671 TA
                                                  ACATG
        G
                     TG ATATTGTGGG TGTTG
                     AC TATAACACCC ACAAC
                     CC
                           CGAG
GAM3817 LOC151242 3' GTGATGTTATTTACATGTGTTG 86672 A A GGG
                     GT AT TTGT ACATGTGTTG
                     CA TA AATA TGTACACAAC
                     C C AA
GAM3817 LOC90155 3' TGTATATTTAGGTATGTGTTG 86673
                                           A G AC
                     TGTA TATT TGGG ATGTGTTG
                     ACAT ATAA ATCC TACACAAC
                       Α
GAM3818 PSG7 3' TGTAGTACATGTTTTATTCTGC 86676
                                          CG C
                     TGTG ACA GTTTTATTCTGC
                     ACAT TGT CAAAATAAGACG
                      CA A
GAM3818 SH3BP2 3' TCTGTATGTTGTTTTATTCTGC 86677
                                            CGACAC
                     TTTGTG GTTTTATTCTGC
                     AGACAT CAAAATAAGACG
                       ACAA
GAM3818 SEMA3C 3' CAACATGTTTTATTTTGC 86678
                                              С
                                          С
                     CGACA GTTTTATT TGC
                     GTTGT CAAAATAA ACG
                       Α
                           Α
GAM3818 LOC150135 3' TCTGTGCGTTGTGCTTTTGTTC 86679
                                              ACAC A
        TGC
                      TTTGTGCG GTTTT TTCTGC
                     AGACACGC CGAAA AAGACG
                        AACA AC
GAM3818 LOC158314 5' TTTGTGGATGTTTCATTTTGC 86680
                                             C CAC
                                                    C
                     TTTGTG GA GTTTTATT TGC
                     AAACAC CT CAAAGTAA ACG
                       _ A__
                              Α
GAM3819 CLDN3 3' TTGGTGGTGGTGGTGG
                                  86683
                                        Α
                                            A TAC
                     TTG GTGGTGGT GT GG
                     AAC CACCACCA CA CC
                          C
GAM3819 CAPN6
             3' TGAGTGGTGGTGG
                                  86684
                                            A TAC
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TGAGTGGTGGT GG

ACA ACAC TACACAAC

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ACTCACCACCA CA CC
                         С
GAM3819 KIAA0601 3' GTGGCTGGGTAGTTACGGAT 86685
                     GTGGT GGTAGTTACGGAT
                     CACCG CCATCAATGCCTA
                       AC
GAM3819 LOC148760 3' CTGAGTGGCATTATGG
                                            GGTA C
                                   86686
                     TTGAGTGGT GTTA GG
                     GACTCACCG TAAT CC
GAM3819 LOC151103 3' TATTGAGTTGTGGTGCAGTGG 86687
                                               G A TAC
                     TATTGAGT GTGGT GT GG
                     ATAACTCA CACCA CG CC
                        A TCA
GAM3819 LOC203078 3' TTGGTGGTGGTGGCGG
                                    86688
                                              A TTA
                     TTG GTGGTGGT G CGG
                     AAC CACCACCA C GCC
                          C ___
GAM3819 LOC254181 5' TTGGGTGGGGAGTGGA
                                    86689
                                          A T T TAC
                     TTG GTGG GG AGT GGA
                     AAC CACC CC TCA CCT
                      C _ _ _
GAM3820 ABCA1 5' TTGTGTTTGCGTCTCTTT 86692
                                           A TG
                     TTGTGTTT CGT CTTT
                     AACACAAA GCA GAAA
                        C GA
             3' TTGTGTTTATTCTACTTTT 86693
                                           CG
GAM3820 CD69
                     TTGTGTTTA TTGCTTTT
                     AACACAAAT GATGAAAA
                        AA
GAM3820 CERD4 3' TGTTGCTGTCGTTGCTTTT 86694
                                          TA
                     TGT GTT CGTTGCTTTT
                     ACA CGA GCAACGAAAA
                      A CA
GAM3820 SELE
             3' TGTGTTTGCATTTATGCTTTT 86695
                                           Α ____
                     TGTGTTT CGT TGCTTTT
                     ACACAAA GTA ACGAAAA
                        C AAT
GAM3820 CCR8
             3' CATTGTGTTTGATGGCTTTT 86696
                                            AC T
                     TATTGTGTTT GT GCTTTT
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GTAACACAAA TA CGAAAA
                         C_ C
GAM3820 CHODL 3' TATTGTGTATGTCACTTCT 86697
                                           TTAC TG
                     TATTGTGT GT CTTTT
                     ATAACACA CA GAAGA
                        TA GT
GAM3820 DIO2
            3' TGTGTTTACCTGTTGGCTTTT 86698
                     TGTGTTTAC GTTG CTTTT
                     ACACAAATG CAAC GAAAA
                        GA C
GAM3820 DIO2
            3' TGTGTTTACCTGTTGGCTTTT 86698
                     TGTGTTTAC GTTG CTTTT
                     ACACAAATG CAAC GAAAA
                        GA C
GAM3820 DKFZP761L0424 3' TGTGCAAACTTGTTGCTTTT 86699
                                               TT
                     TGTGT AC GTTGCTTTT
                     ACACG TG CAACGAAAA
                       TT AA
GAM3820 FLJ10521 3' TTGTGTTTTTTGCTTTT 86700
                                          ACG
                     TTGTGTTT TTGCTTTT
                     AACACAAA AACGAAAA
                        Α
GAM3820 KCNH8 3' TGTGTTTAGATACTTTT 86701
                                          CGT
                     TGTGTTTA TGCTTTT
                     ACACAAAT ATGAAAA
                        CT_
GAM3820 KIAA0865 3' CTGTGTCCTGTGCTTTT
                                  86702
                                           ACGT
                     TTGTGTTT TGCTTTT
                     GACACAGG ACGAAAA
                        AC__
GAM3820 KIAA1254 3' TATTTACCATACGTTGCTTTT 86703
                                           GTGTT
                     TATT TACGTTGCTTTT
                     ATAA ATGCAACGAAAA
                      ATGGT
GAM3820 KLHL4 3' TTGTGTTTCATGACCTTT 86704
                                          A T
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_ C
GAM3820 MGC15482 3' TATTGTCTTTCCATGCTTTT 86705 G A T
TATTGT TTT CGT GCTTTT
|||||||||||||

TTGTGTTT CGT GCTTTT

AACACAAA GTA TGGAAA

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GG_
GAM3820 PSMD12 3' TATGCTCTATGTTGCTTTT 86706
                                            AC_
                     TGTGTTT GTTGCTTTT
                     ATACGAG CAACGAAAA
                        ATA
GAM3820 PTPRT 3' TACTGTGCTTTTGCTTTT 86707
                                            ACG
                     TATTGTGTTT TTGCTTTT
                     ATGACACGAA AACGAAAA
GAM3820 TUSP
             5' TTGGCTTGCGTTGCTTTT 86708
                                         T A
                     TTG GTTT CGTTGCTTTT
                     AAC CGAA GCAACGAAAA
                      С
GAM3820 ZFP100 3' TGTGTCCAGTGCTTTT
                                          СТ
                                 86709
                     TGTGTTTA GT GCTTTT
                     ACACAGGT CA CGAAAA
GAM3820 LOC126616 3' TATTGGTTTGCTGCTTT
                                   86710
                                           T AC
                     TATTG GTTT GTTGCTTT
                     ATAAC CAAA CGACGAAA
GAM3820 LOC131000 3' TTGTGTTTACAACTTTT 86711
                                             TT
                     TTGTGTTTACG GCTTTT
                     AACACAAATGT TGAAAA
GAM3820 LOC144266 5' TTGTGTTCCCAGGCTTTT 86712
                                            TA TT
                     TTGTGTT CG GCTTTT
                     AACACAA GT CGAAAA
                        GG C_
GAM3820 LOC152503 5' TATTGGTCTGAGGTTGCTTTT 86713
                                             T AC_
                     TATTG GTTT GTTGCTTTT
                     ATAAC CAGA CAACGAAAA
                       _ CTC
GAM3820 LOC152897 3' TTGTGTTTTTGCGCTTTT 86714
                                            AC T
                     TTGTGTTT GT GCTTTT
                     AACACAAA CG CGAAAA
GAM3820 LOC153918 3' TGTGTTTAATGCTTTT
                                   86715
                                           CGT
                     TGTGTTTA TGCTTTT
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ATAACA AAA GTA CGAAAA

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ACACAAAT ACGAAAA
                       T___
GAM3820 LOC201799 3' TTGTGCCATTGCTTTT 86716
                                        TTA
                    TTGTGT CGTTGCTTTT
                    AACACG GTAACGAAAA
GAM3821 C6orf33 3' TTAAAACATGCTGGTCAAATAT 86719 T CT_ CG
        GG
                     TTAAAACAT GCTGG GG TGG
                    AATTTTGTA CGACC TT ACC
                       AGT AT
GAM3821 LOC63928 3' CTAAAATATTGCTGGCTG 86720
                    TTAAAA ATTGCTGGCTG
                    GATTTT TAACGACCGAC
                                         CT T
GAM3822 PRKCN 5' TTCCTTTCAGTCTGTACT 86723
                    TTCCTTTC GTTT GTACT
                    AAGGAAAG CAGA CATGA
                       T_ _
GAM3822 LOC127703 5' TATTCCTTTTTGTGCTTACT 86724 CC TTTG
                    TATTCCTTT TGT TACT
                    ATAAGGAAA ACA ATGA
                       A CGA
GAM3822 LOC222166 3' TCCTTTCCTGCCCTTGTA 86725
                    TCCTTTCCTGTT TTGTA
                    AGGAAAGGACGG AACAT
                         G
GAM3823 ANK3 3' GGTTACAAATGATTGGCTTACT 86728 GC
                                               AAAA
        GAAA
                      GGT ACAAATGATT TGAAA
                    CCA TGTTTACTAA
                                   ACTTT
                     A_
                          CCGAATG
GAM3823 CHN2
            3' GGTGTCACAGCAAAATGA 86729
                                        _ AATGAT
                    GGTG CACA TAAAATGA
                    CCAC GTGT GTTTTACT
                      A C_
GAM3823 DAZ
            3' GGTCACAATATAAAATGA 86730 G ATGAT
                    GGT CACAA TAAAATGA
                    CCA GTGTT ATTTTACT
                     _ AT_
GAM3823 GLS
            3' GGTCACAATTTAAAATGAA 86731
                                       G ATGA
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GGT CACAA TTAAAATGAA

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CCA GTGTT AATTTTACTT
                     _ A___
GAM3823 HNF3A 3' GTGCATGAAAAATGA 86732 CAAA TT
                   GTGCA TGA AAAATGA
                   CACGT ACT TTTTACT
GAM3823 PDYN 3' GGTGCACAGGAGATCTTTTGA 86733 AAT AAAA
                   GGTGCACA GATT TGA
                   CCACGTGT CTAG ACT
                      CCT AAA
GAM3823 TRAM 3' GGTGACACAAGTGAGAAATG 86734
                                      _ A TTA
                   GGTG CACAA TGA AAATG
                   CCAC GTGTT ACT TTTAC
                     T C C
GAM3823 CLLD8 5' GGTCCACAAATGGATGAA 86735 G ATTAAA
                   GGT CACAAATG ATGAA
                   CCA GTGTTTAC TACTT
                    G C____
GAM3823 DCTN4 3' GGTCACAAAAAAATGA 86736 G TGATT
                   GGT CACAAA AAAATGA
                   CCA GTGTTT TTTTACT
GAM3823 ELOVL2 3' GGTACAAATGATTTATGAA 86737 CA
                                            AAA
                   GGTGCA AATGATT ATGAA
                   CCATGT TTACTAA TACTT
GAM3823 FLJ20275 3' GTGCACAAATACTAAGATG 86738 G A
                   GTGCACAAAT ATTAA ATG
                   CACGTGTTTA TGATT TAC
                       _ C
GAM3823 KIAA1009 3' GGTACACAGAGACATAAAGATG 86739
                                           AAT _ _
                   GGTGCACA GAT TAAA ATG
                   CCATGTGT CTG ATTT TAC
                      CT_ T C
                                          AA_ AAAA
GAM3823 KIAA1881 3' GGTGCACACGGTGACCCCTG 86740
                   GGTGCACA TGATT TG
```

CCACGTGT ACTGG AC GCC GG_

GGTG ACAAATGA AATG

TTAA

GAM3823 LOC126616 3' AGTGTACAAATGAAATG 86741 C

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TCAC TGTTTACT TTAC
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Α ____

GAM3823 LOC131870 3' AGTGCACAAAGCACAGATGAA 86743 TG TAAA GGTGCACAAA AT ATGAA

TCACGTGTTT TG TACTT

CG TC

GAM3823 LOC142948 3' AGTGCACAGGTAACAGTGAA 86744 AA TAAAA

GGTGCACA TGAT TGAA

TCACGTGT ATTG ACTT

CC TC

GAM3823 LOC143286 5' GGTACAAATAAAAAATGAA 86745 CA TT

GGTGCA AATGA AAAATGAA

CCATGT TTATT TTTTACTT

GAM3823 LOC145231 5' GGTGCCGTGGAAAAATGAA 86746 ACAAA ATT

GGTGC TG AAAATGAA

CCACG AC TTTTACTT

GC CT

GAM3823 LOC153514 3' AGTGTACAAACAAAATGAA 86747 C GATT

GGTG ACAAAT AAAATGAA

TCAC TGTTTG TTTTACTT

Ą

GAM3823 LOC155434 3' GGTGCCCTTAAAATGAA 86748 ACAAATGA

GGTGC TTAAAATGAA

CCACG AATTTTACTT

GG_____

GAM3823 LOC158724 3' GATTGATGATTAAAATGA 86749 GCACAA

GGT ATGATTAAAATGA

CTA TACTAATTTTACT

AC___

GAM3823 LOC221931 3' GGTGCACAGAAAAATGAA 86750 AAT TT

GGTGCACA GA AAAATGAA

CCACGTGT CT TTTTACTT

GAM3823 LOC253782 3' GTGCACAAGAAATGAA 86751 AT TTAA GTGCACAA GA AATGAA

CACGTGTT CT TTACTT

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GAM3823 LOC254848 5' GGTCCACGTTTTAAAATGA 86752 G AAATGA
                     GGT CAC
                             TTAAAATGA
                          CCA GTG AATTTTACT
                      G CAA
GAM3823 LOC93206 3' GGTGCACAATAAATGGTGAA 86753
                                              A TTAAAA
                     GGTGCACAA TGA
                                    TGAA
                     CCACGTGTT ATT
                                   ACTT
                         TACC
GAM3824 FABP5 3' TGTAAAATGTTTATGATAAA 86756
                     TGTAAAAT TTTGT GATAAA
                     ACATTTTA AAATA CTATTT
GAM3824 ZHX1 3' TGTAAAATTTTTGGTCAA 86757
                     TGTAAAATTTTTG TCGA
                     ACATTTTAAAAAC AGTT
                          C
GAM3824 KIAA0981 3' TGAAAATTTTTGCCACAAA 86758 T
                                               G
                     TG AAAATTTTTGTC ATAAA
                     AC TTTTAAAAACGG TGTTT
GAM3824 KIAA1615 3' GTAAAATTTTCTTATAAAAAT 86759
                                              GTCG
                     GTAAAATTTTT ATAAAAAT
                     CATTTTAAAAG TATTTTTA
                         AA
                                              T C
GAM3824 SGP28 3' TGTAAAATTTATGCAGATAAAA 86760
         Α
                      TGTAAAATTT TGT GATAAAAA
                     ACATTTTAAA ACG CTATTTTT
                         T T
GAM3824 LOC201973 3' TGCAAAATTTTTCTCAAAAAA 86761
                                               G T
                     TGTAAAATTTTT TCGA AAA
                     ACGTTTTAAAAA AGTT TTT
                          G T
GAM3825 DTNB
             3' GCGGGTGGAGTGACGTCTGGCA 86764
                                             CA AT T
         GC
                      GCG TGGA TG TG CTGGCAGC
                     CGC ACCT AC GC GACCGTCG
                      CC C_ T A
GAM3825 DTNB
             3' GCGGGTGGAGTGACGTCTGGCA 86764
                                             CA AT T _
         GC
                      GCG TGGA TG TG CTGGCAGC
```

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CGC ACCT AC GC GACCGTCG
                      CC C_T A
                                         ___ AT C
GAM3825 FES 3' GCAGTGTGGATGCTGGTGGC 86765
                    GCA TGGA TGTTG TGGC
                     CGT ACCT ACGAC ACCG
                      CAC _ C
GAM3825 ARHGDIG 3' TGGGATGCCCCTGGCAGC 86766
                                          AAT G
                    TGG TGTT CTGGCAGC
                     ACC ACGG GACCGTCG
                      CT G
GAM3825 FLJ20618 3' GCATAGAATTGTTCTCTGGC 86767
                                              G
                     GCATGGAATTGTT CTGGC
                     CGTATCTTAACAA GACCG
                          GA
GAM3825 KIAA0261 3' GCATGGAATTGTTAACAGC 86768
                                              CTG
                    GCATGGAATTGTTG GCAGC
                     CGTACCTTAACAAT TGTCG
GAM3825 KIAA0459 3' CATGGATGGCTGGCAG
                                          AT TT
                                  86769
                     CATGGA TG GCTGGCAG
                     GTACCT AC CGACCGTC
GAM3825 MGC21621 5' GCGTCTGGGCCCCTGCTGGCAG 86770
                                             CA AA G
        С
                     GCG TGG TT TTGCTGGCAGC
                     CGC ACC GG GACGACCGTCG
                      AG C_ G
GAM3825 SCYB10 3' TGGAATTGTATGTAGGTAGC 86771
                                            CT C
                    TGGAATTGT TG GG AGC
                    ACCTTAACA AC CC TCG
                        T AT A
GAM3825 LOC131873 3' GCTGGAATTGTCAGGAG 86772 A
                                              GCT C
                     GC TGGAATTGTT GG AG
                     CG ACCTTAACAG CC TC
                          T__ _
GAM3825 LOC146136 5' GCGTGGAATTGTTGACTGG 86773 A
                    GC TGGAATTGTTG CTGG
                     CG ACCTTAACAAC GACC
                     С
                          Т
GAM3825 LOC148397 3' GCACATGGGCAGGCTGGCAGC 86774
                                               AATT T_
                    GCGCATGG GT GCTGGCAGC
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CGTGTACC CG CGACCGTCG
                       ____ TC
GAM3825 LOC157421 5' TGGAGGGTGAGGCTGGCAGC 86775
                                         AT TT
                    TGGA TG GCTGGCAGC
                    ACCT AC CGACCGTCG
                     CCC TC
GAM3825 LOC200317 5' GCGTTGGGGTTACCAAGGGTAG 86776 CA AATT ___ C
                    GCG TGG GTTGCT GG AGC
                    CGC ACC CAATGG CC TCG
                     A C TTC A
GAM3825 LOC220565 3' GCGTGGAATTGTTGACTGG 86773 A
                    GC TGGAATTGTTG CTGG
                    CG ACCTTAACAAC GACC
                    С
                         Т
GAM3825 LOC64150 5' GCGCACGGGACGCTGGCG 86777
                                          AATTGT A
                    GCGCATGG TGCTGGC G
                         CGCGTGCC
                              GCGACCG C
                       CT __
                              С
                                       __ CAAAA A
GAM3826 CD34 3' TGCGGCAGAGAGGAGGG 86780
                    TGCG C GAGA G GAGGG
                    ACGC G CTCT C CTCCC
                     СТ
GAM3826 ED1
           5' CTGGGCGGACGGAGCAGGG 86781
                                       C A AAAA
                    CTG GCG GAC GAG AGGG
                    GAC CGC CTG CTC TCCC
                     C C C__ G
GAM3826 HOXA7 3' GACTGTCCGGTGCAGAGAGGG 86782 CG AGACAAA
                    GACTG CG AGAGAGGG
                    11111 11
                         CTGAC GC
                              TCTCTCCC
                     AG CACG
GAM3826 HOXA7 3' GACTGTCCGGTGCAGAGAGGG 86782
                                          CG AGACAAA
                    GACTG CG
                              AGAGAGGG
                    CTGAC GC TCTCTCCC
                     AG CACG
GAM3826 KRTHA5 3' CTGCGCGAAGAGAG
                                86783
                                        GACAAA
                    CTGCGCGA AGAGAGG
                    GACGCGCT
                              TCTCTCC
GAM3826 PATE 3' GACTGTAGAAAAGGAGAGG 86784
                                        CGCG C A
```

GACTG AGA AAA GAGAGG

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A___ C
GAM3826 PDE7A 5' CTGTCCCGAGGCAAAAGAGAGG 86785 CG_ A
        G
                    CTG CGAG CAAAAGAGAGGG
                   GAC GCTC GTTTTCTCTCCC
                    AGG C
GAM3826 RAI3
           3' GACAGTGCAAGAAGAGAGG 86786
                                      TGC CAAA
                   GAC GCGAGA AGAGAGG
                   CTG CGTTCT TCTCTCC
                    TCA
GAM3826 SCD
            3' CTGTGCCTCATGAGAGAGGG 86787 C GAGA AA
                   CTG GC CA AGAGAGGG
                   GAC CG GT TCTCTCCC
                    A GA AC
GAM3826 SF1 5' GCGCGAGACGCACAAAGAGGG 86788
                                         AAA
                   GCGCGAGAC AGAGAGGG
                   CGCGCTCTG TTTCTCCC
                       CGTG
GAM3826 SFRP1 3' CTGCCGCAGAGAGAGGG 86789
                                       G _ CAAAA
                   CTGC CG AGA GAGAGGG
                   GACG GC TCT CTCTCCC
                     _ G __
GAM3826 SHMT2 3' CTGCCTGAGAGAGAGAGGG 86790 GC CAAAA
                   CTGC GAGA GAGAGGG
                   GACG CTCT CTCTCCC
                     GA CTC
GAM3826 SLC2A3 3' GAGTGCGTGGGATGAGAAAGG 86791 C CGA CAAA
                   GATGCG GA AGAGAGG
                   CT ACGC CT TCTTTCC
                    C ACC AC
GAM3826 SNX5 5' CTGTGCGAGGAAAGAAG 86792
                                      C ACAAA
                   CTG GCGAG AGAGAGG
                   GAC CGCTC TTTCTTC
                    A C_
GAM3826 CAMTA2 3' GACTGCACGAGGCGCCCCCAGG 86793
                                            ACAAAAGAG
        G
                    GACTGCGCGAG AGGG
                   Ш
                   CTGACGTGCTC
                                 TCCC
                       CGCGGGGG_
GAM3826 DKFZP434I0714 3' GACTACACTTAGGAGGGAGGG 86794
                                              GAGACAAA A
                   GACTGCGC AG GAGGG
```

CTGAC TCT TTT CTCTCC

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CTGATGTG
                             TC CTCCC
                       AATCC C
GAM3826 FLJ10110 5' GACTGAGCGCGCGAGAGAGGG 86795 C AGACAAA
                    GACTG GCG AGAGAGGG
                    11111 111
                        CTGAC CGC
                               TCTCTCCC
                      T GCGC
GAM3826 FLJ11186 5' CCGCGCGGAGAGAGG
                                 86796
                                        A CAAAA
                    CTGCGCG GA GAGAGG
                    GGCGCGC CT CTCTCC
GAM3826 FLJ22390 5' GATTGCGCGAGGAGGA
                                 86797 C
                                           ACAAAAGA
                    GA TGCGCGAG
                                 GAGGG
                    CT ACGCGCTC
                                 CTCCT
GAM3826 FLJ32334 3' GACTGCAGCCAGGAGAGAGGG 86798
                                            G ACAAA
                    GACTGC GC AG AGAGAGGG
                    CTGACG CG TC TCTCTCCC
                      T G C____
GAM3826 HRH3 3' CTGCCGTGGCATTAAGAGAGGG 86799
                                          G AGA A
                    CTGC CG CA AAGAGAGGG
                    GACG GC GT TTCTCTCCC
                     ACC AA
GAM3826 KIAA0335 3' CTGGTGGAAGAAGAGAGGG 86800
                                         CGC CAAA
                    CTG GAGA AGAGAGGG
                    GAC TTCT TCTCTCCC
                     CACC
GAM3826 KIAA0710 3' TGGCAAGGATAAAAGAGGG 86801 C ACAA
                    TG GCGAG AAGAGAGGG
                    AC CGTTC TTTTCTCCC
                    _ CTA_
GAM3826 KIAA1041 5' CTGCGGCTGGAAGAGAGAGAGG 86802
                                           _GA CAAA
                    CTGCG C GA AGAGAGGG
                    GACGC G CT TCTCTCCC
                      C AC TC
GAM3826 KIAA1274 3' CTGCCGGGACAGAGA 86803
                                        G A AAA
                    CTGC CG GACA GAGAG
                    GACG GC CTGT CTCTC
                     _ C
GAM3826 KIAA1668 3' AACTGTGAGGGAGAGAG 86804
                                          CGC ACAAA
                    GACTG GAG AGAGAGG
```

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TTGAC CTC TCTCTCC
                      A__ CC___
GAM3826 MRPS21 5' GACGCGCGAGATGGAGCACATG 86805 T CAAAA AG
        G
                    GAC GCGCGAGA GAG GG
                    CTG CGCGCTCT CTC CC
                        AC___ GTGTA
GAM3826 PTPNS1 3' GCTGTCTCTGGGTAAAAGAGAG 86806 A CGCGAGAC_
                     G CTG AAAAGAGAGGG
        GG
                    1 111
                         C GAC TTTTCTCTCCC
                    AGAGACCCA
GAM3826 RAB11B 3' ACGAGACAGAGGAGGG 86807
                                         AA A
                    GCGAGACA AG GAGGG
                    TGCTCTGT TC CTCCC
GAM3826 RAB24 3' GATAAACAGACAAAAGGGAGGG 86808 C C G
                    GA TG GC AGACAAAAG GAGGG
                    CT AT TG TCTGTTTTC CTCCC
                    _ T _ C
GAM3826 LOC143903 5' GACCGCACGGGAGGCGGGGGG 86809
                                            A CAAAAGA
                      GACTGCGCG GA GAGGG
        AGGG
                    CTGGCGTGC CT CTCCC
                       C CCGCCCCC
GAM3826 LOC149506 3' CTGCTGGAGACAAGAGAGGG 86810 GC
                                               AA
                    CTGC GAGACA AGAGAGGG
                    GACG CTCTGT TCTCTCCC
                     AC
GAM3826 LOC149706 3' CTGCTGCTCCAAGAGAGGG 86811
                                          GAGACAA
                    CTGC GC AAGAGAGGG
                    GACG CG TTCTCTCCC
                     A AGG
GAM3826 LOC150935 3' GACTGGCAACAGGGAGGG 86812
                                          C GA AAA A
                    GACTG GC GACA GAG GG
                    CTGAC CG TTGT CTC CC
                      _ __ CC_ _
GAM3826 LOC152283 3' GCTGTCGATCAGGAGAGAGGG 86813 A CG GA AA
                    G CTG CGA CA AGAGAGGG
                    C GAC GCT GT TCTCTCCC
                     _ A_ A_ CC
GAM3826 LOC219653 3' CTGTGGTGGGAGAGAAAGGAGA 86814 CGC___ C A
        GGG
                     CTG GAGA AAA GAGAGGG
```

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ACCACC C C
GAM3826 LOC253962 5' CTGGGGAGGTGGAAGAGAGGG 86815 CGC ACAA
                    CTG GAG AAGAGAGGG
                    GAC CTC TTCTCTCCC
                     CC CACC
GAM3826 LOC255565 5' GCTGGTGGACAAAGAGGGG 86816 GCGA
                    GC GACAAAAGAG GGG
                    CG CTGTTTTCTC CCC
                     ACCAC
GAM3826 LOC85414 3' GACTGGGGAGAGAGAGAGGG 86817
                                             CGC CAAAA
                    GACTG GAGA GAGAGGG
                    CTGAC CTCT CTCTCCC
                      CC CTC
GAM3826 LOC93082 5' GACTGCGCGGGCACAGAGCAGG 86818
                                              AGACAAA _
                    GACTGCGCG AGAG AGG
                    TCTC TCC
                    CTGACGCGC
                        CCGTG__ G
GAM3827 ALEX2 5' TGGAACTGGATTGCTTAAG 86821
                                           CA
                    TGGAACTGGAT TTAGG
                    ACCTTGACCTA AATTC
                        ACG
GAM3827 FOXI1 3' TGGGGCTGGCATGGAGGACCTC 86822 AA ATCATT
        Т
                     TGG CTGG AGGACCTCT
                    ACC GACC
                             TCCTGGAGA
                     CC GTACC_
GAM3827 KLK4
                                         AA ATTA
            3' GGGGCTGGGACCTCT 86823
                    GG CTGG ATC GGACCTCT
                    CC GACC TGG CCTGGAGA
                     CC C A
            3' TGGAACGGATCATTAAGGACCT 86824
GAM3827 PRL
                                          Т
                    TGGAAC GGATCATTA GGACCT
                    ACCTTG CCTAGTAAT CCTGGA
GAM3827 RUNX1 3' TGGAACTAGATTGACCT
                                 86825
                                           CATTAG
                    TGGAACTGGAT
                                 GACCT
                    ACCTTGATCTA
                                 CTGGA
                        A_{\underline{\phantom{a}}}
                                       C TCATT C
GAM3827 SS18
            3' TGGAATGGAAGGATCT
                                86826
                    TGGAA TGGA AGGA CT
```

GAC CTCT TTT CTCTCCC

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ACCTT ACCT TCCT GA
GAM3827 FLJ10743 3' TGGAACTGGCAGGACCC
                                          ATCAT
                                  86827
                     TGGAACTGG TAGGACCT
                     ACCTTGACC GTCCTGGG
GAM3827 FLJ12700 3' TGGGACTCGGGGGACCTC 86828
                                          A _ ATCATTA
                     TGG ACT GG GGACCTC
                     ||||||
                     ACC TGA CC
                                CCTGGAG
                      CGC
GAM3827 FLJ21791 3' TGCAATTGGATTAGAACACC 86829 G C CAT
                     TG AA TGGAT TAGGAC CT
                     AC TT ACCTA ATCTTG GG
                     GA
                         Т
GAM3827 KIAA0280 3' TGGAATGGGTAGAGGACCTCT 86830 C ATCATT
                     TGGAA TGG AGGACCTCT
                     ACCTT ACC TCCTGGAGA
                      _ CATC_
GAM3827 KPTN 3' TGGAATGGGATCATCCCT 86831
                                         CT
                                              AGGA
                     TGGAA GGATCATT CCT
                     ACCTT CCTAGTAG GGA
                       AC
GAM3827 PDCD6IP 3' TGGAACTGGGGCACAGCTTCT 86832
                                             AT TA ACC
                     TGGAACTGG CAT GG TCT
                     ACCTTGACC GTG TC AGA
                        CC __ GA_
GAM3827 PLCL2 3' TGGAACTGAGTTAGAATGTCT 86833
                                            ATCA
                                                  CC
                     TGGAACTGG TTAGGA TCT
                     ACCTTGACT AATCTT AGA
                        C___ AC
GAM3827 LOC129676 5' TGGGTCTTATCTTTGGGACCT 86834
                                            AA GG A A
                     TGG CT ATC TT GGACCT
                     ACC GA TAG AA CCTGGA
                      \mathsf{CA}\ \mathsf{A}_{-}\ \mathsf{A}\ \mathsf{C}
GAM3827 LOC148936 5' TGGGGTCTGGAGGACCTC 86835 AA_ TCATTA
                     TGG CTGGA GGACCTC
                     ACC GACCT
                                CCTGGAG
                      CCA
GAM3827 LOC148938 5' TGGGGTCTGGAGGACCTC 86835 AA_ TCATTA
                     TGG CTGGA GGACCTC
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ACC GACCT
                                CCTGGAG
                      CCA
GAM3827 LOC149606 3' GGATTGGCTCAGACCCCT 86836 AC A TTAG
                     GGA TGG TCA GACCTCT
                     CCT ACC AGT CTGGGGA
                      A G
GAM3827 LOC222985 5' TGGAACTGGAACATTCACCAG 86837
                     TGGAACTGGA TCATTAG
                     ACCTTGACCT AGTGGTC
                         TGTA
GAM3828 RBBP9
             3' TTAGTGTAACAAATTCAA 86840
                     TTAGTGTAATAAATTTAA
                     AATCACATTGTTTAAGTT
GAM3828 CDW92 3' TTAGTGCAATAAGTTTAAAAAA 86841
                                               A T
                     TTAGTGTAATAA TTTAA AAA
                     AATCACGTTATT AAATT TTT
                          C T
GAM3828 KATNB1 3' TAGTTACAAATTTAATAAAAT 86842
                                           GTA
                     TAGT ATAAATTTAATAAAAT
                     ATCA TGTTTAAATTATTTTA
GAM3828 KIAA1737 3' AGTGTAATAAATTACAAA 86843
                                             TA
                     AGTGTAATAAATT ATAAA
                     TCACATTATTTAA TGTTT
GAM3828 SDCBP 3' TTAGTGTAATAACTTTTACA 86844
                                             A A
                     TTAGTGTAATAA TTT ATA
                     AATCACATTATT AAA TGT
                         G A
GAM3828 LOC253943 3' TTAGTGTTGTAAATTTAAC 86845
                                            AA
                     TTAGTGT TAAATTTAAT
                     AATCACA ATTTAAATTG
                        AC
GAM3828 LOC255042 3' TTAGTGTAACAGAACTCA 86846
                     TTAGTGTAATA AATTTA
                     AATCACATTGT TTGAGT
                         C
                                            CTC_
GAM3829 CD244 3' CCTCTTGCTTTGGAAGATGG 86849
                     CCTCTTGT GGAGA GG
```

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GGAGAACG CTTCT CC
                       AAAC A
GAM3829 GATA2 3' CTTTTGTCTCAGAGTAGG 86850 C
                                            AC
                    CT TTGTCTCGGAG GG
                    GA AACAGAGTCTC CC
                     Α
                         ΑT
GAM3829 NEUROD2 3' CCTTTTTGCCTCGGCAGCTGG 86851 C_
                                                AGA _
                    CCT TTGTCTCGG CGGC GG
                    GGA AACGGAGCC GTCG CC
                     AA
GAM3829 OLIG2 3' TCTTTTCCCGGAGGTGGTGG 86852
                                         G
                                           AC C
                    TCTT TCTCGGAG GG GG
                    AGAA AGGGCCTC CC CC
                         CA A
                     Α
GAM3829 PCTK1 3' TCCCCCTGCAACTGGGGATGGC 86853 T C A C
        GG
                     TCCC CTTGT CT GG GA GGCGG
                    AGGG GGACG GA CC CT CCGCC
                     _ TT C _ A
GAM3829 PCTK1 3' TCCCCCTGCAACTGGGGATGGC 86853 T __ C A C
        GG
                     TCCC CTTGT CT GG GA GGCGG
                    AGGG GGACG GACCCT CCGCC
                     _ TT C _ A
GAM3829 PCTK1 3' TCCCCCTGCAACTGGGGATGGC 86853 T __ C A C
        GG
                     TCCC CTTGT CT GG GA GGCGG
                    AGGG GGACG GA CC CT CCGCC
                       TT C \_ A
                                          GAGAC C
GAM3829 SIX3
           3' CCCTCTTGTCCTCGTGGTGG 86854
                    CCCTCTTGT CTCG GG GG
                    GGGAGAACA GAGC CC CC
                       G A____ A
GAM3829 13CDNA73 5' CCCTGCAGCCCTCGGAGGCGGC 86855
                                             CTT _ A
        GG
                     CCCT GTC TCGGAG CGGCGG
                    GGGA CGG AGCCTC GCCGCC
                     CGT G C
GAM3829 CCNI
            5' TCCCTCTCGCCATAGGGCGGCG 86856
                                             TC_ AGA
        G
                     TCCCTCTTGTC GG CGGCGG
                    AGGGAGAGCGG CC GCCGCC
                        TAT C__
GAM3829 ELOVL1 3' TCCCTCTTGTTTGTGGACAG 86857
                                           CTCGGA
                    TCCCTCTTGT GACGG
```

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AACAC_
GAM3829 FASTK 5' TCCCTCTCCCACAGGAGGCGGC 86858
                                               \mathsf{G} \mathsf{T}_{-} \mathsf{A}
         GG
                       TCCCTCTT TC C GGAG CGGCGG
                     AGGGAGAG GG G CCTC GCCGCC
                         _ TT C
GAM3829 GABBR1 5' CTCTTCTTCCCCGGGGCGGCGG 86859
                                               G__
                                                    AGA
                     CTCTT TCTCGG CGGCGG
                     GAGAA GGGGCC GCCGCC
                       GAA
                             CC
GAM3829 KIAA1814 3' TCCTTCTGGTCTCAAAGGTGG 86860
                                             СТ
                                                   AC
                     TCC TCT GTCTCGGAG GG
                     AGG AGA CAGAGTTTC CC
                       A C
                              CA
GAM3829 MGC2306 3' CTTTTGTCTCAGAGTAGG 86850 C
                                                AC
                     CT TTGTCTCGGAG GG
                     GA AACAGAGTCTC CC
                      Α
                           ΑT
GAM3829 OS-9
             5' CTTATGCAGAGGAGACGGCGG 86861
                                           CT CTC
                     CT TGT GGAGACGGCGG
                     GA ACG CCTCTGCCGCC
                      AT TCT
GAM3829 RNF10 5' TCTTGTCCATGTCGGAGGCGGT 86862
                                                    A C
                       TCTTGTC TCGGAG CGG GG
         GG
                     AGAACAG AGCCTC GCC CC
                        GTAC
                               C A
GAM3829 ZF5128 3' CTCTTTCCCAGAGGTGGCGG 86863
                                             G
                                                 AC
                     CTCTT TCTCGGAG GGCGG
                     GAGAA AGGGTCTC CCGCC
                           CA
GAM3829 LOC126755 3' TCCCTCTCGTCTTGGAGA 86864
                                               С
                     TCCCTCTTGTCT GGAGA
                     AGGGAGAGCAGA CCTCT
GAM3829 LOC144559 5' TCTTATTTCAAAAACGGTGG 86865
                                                   C
                     TCTTGT TCGGAGACGG GG
                     AGAATA AGTTTTTGCC CC
                        Α
                             Α
GAM3829 LOC150113 5' TCCCTCTTTTCTTGGGTGCTGG 86866
                                                G C AGACG _
```

TCCCTCTT TCT GG GC GG

AGGGAGAACA

CTGTC

AGGGAGAA AGA CC CG CC

A A CA___ A

GAM3829 LOC151278 5' TCCCTGTTGTTTTGGAAATGCC 86867 C CTC CG_

GCGG TCCCTTTGT GGAGA GCGG

AGGGA AACA CCTTT CGCC

C AAA ACGG

GAM3829 LOC170394 5' TCCCTCTTGCTCCTCCTGGCGG 86868 CT GGAGAC

TCCCTCTTGT C GGCGG

AGGGAGAACG G CCGCC

AG AGGA

GAM3829 LOC255019 5' TCCTTCCTGTCTACGGCG 86869 C CGGAG

TCC TCTTGTCT ACGGCG

AGG AGGACAGA TGCCGC

4

GAM3829 LOC56270 5' CCTCTCGCTGGGGACGGCGG 86870 T C A

CCTCTTG CT GG GACGGCGG

GGAGAGC GA CC CTGCCGCC

_ C _